

Profil-Zeichnungen des Hoerder Bergwerks- und Hütten-Vereins in ...

Hoerder Bergwerks- und Hütten-Verein, Hoerde, Westphalia

D669.1 H673

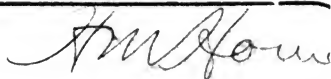
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**HENRY M. HOWE
BEQUEST**



Profil-Zeichnungen

des

HOERDER BERGWERKS-

und

HÜTTEN-VEREINS

in

Hoerde

(WESTFALEN).

AUSGABE 1892.



1000 1000 1000

1000 1000

Allgemeine Bemerkungen.

Sämmtliche bei den Profilen eingeschriebene **Maasse** sind **Millimeter**.

In nachstehender Tabelle der **I-Träger** bedeutet:

Q = Querschnitt des Profils in Quadrat-Centimetern,
 T = Trägheitsmoment
 W = Widerstandsmoment

bezo-gen auf Centimeter.

Diese Buchstaben haben auf den Profilblättern die gleiche Bedeutung.

Die Tragfähigkeiten in der Tabelle sind für **I-Träger** aus Flusseisen, für eine Inanspruchnahme dieses Materials von 750, 900 und 1125 Kg (das Bruchmodul zu 4500 Kg angenommen) pro Quadrat-Centimeter, also für eine 6-, 5- und 4-fache Sicherheit berechnet, welche drei Fälle für die Praxis hinlänglich genügen.

Ferner ist bei der Berechnung die Annahme zu Grunde gelegt, dass der belastete **I-Träger** an seinen beiden Enden frei aufliegt und die Last gleichmässig auf seiner ganzen Länge vertheilt ist.

Wirkt die Last bei gleicher Lage des **I-Trägers** in der Mitte desselben, so trägt er die **Hälfte**; —

ist der Stab an beiden Enden fest eingespannt und wirkt die Last in der Mitte, so trägt er das **Gleiche**; —

ist der Stab an beiden Enden fest eingespannt und die Last gleichmässig darauf vertheilt, so trägt er das **Doppelte**; —

ist der Stab an einem Ende fest eingespannt und die Last gleichmässig darauf vertheilt, so trägt er nur ein **Viertel**; —

ist endlich der Stab an einem Ende fest eingespannt und an dem andern Ende belastet, so trägt er nur ein **Achtel**; —

der in der Tabelle angeführten Belastungen.

Tabelle über die Dimensionen, Gewichte

[illegible]

te, Momente und Tragfähigkeit

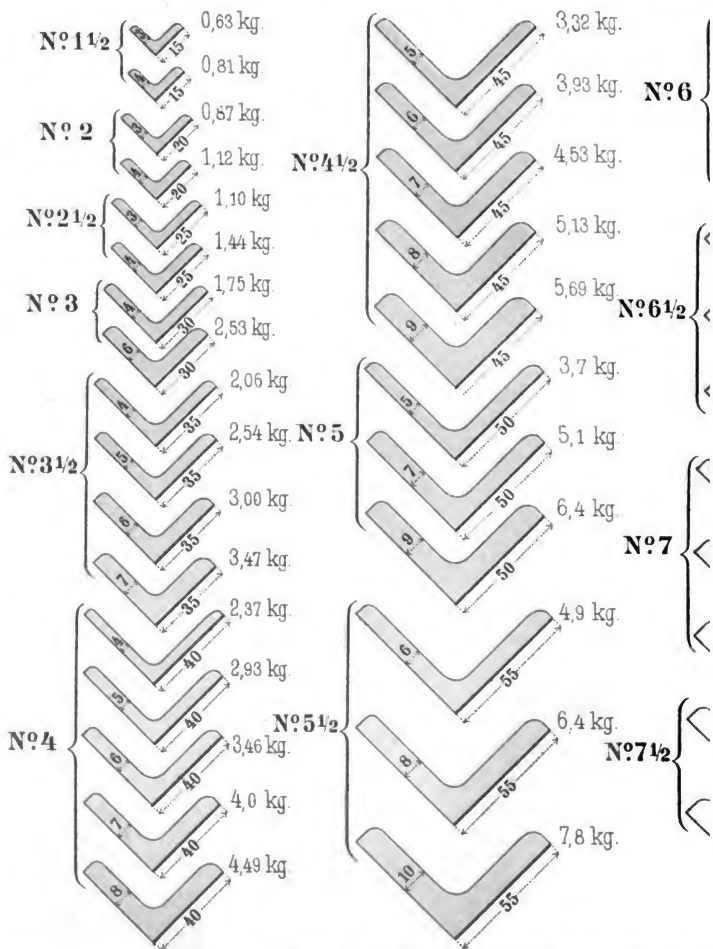
Tragfähi

gleichmässig vertheilte Belastung

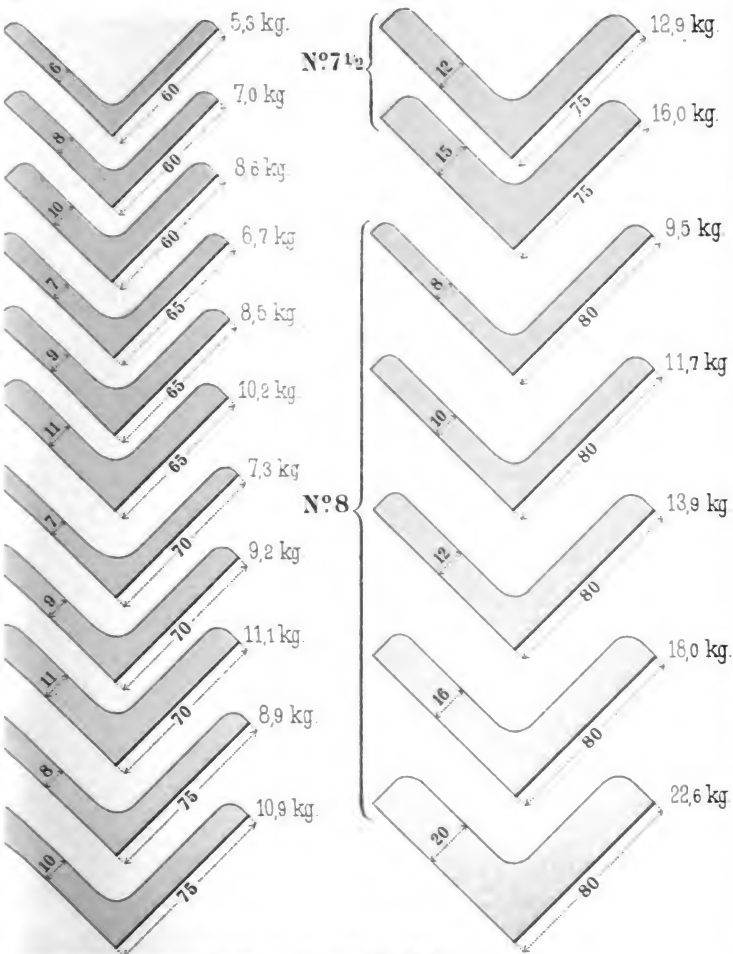
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Blatt 1.

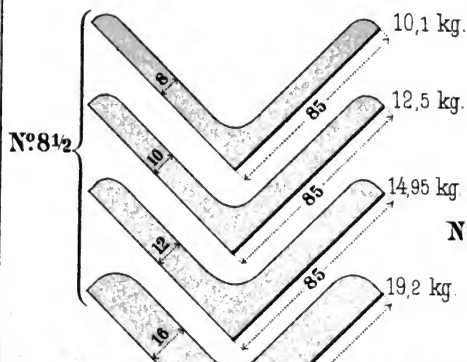
HOERDER BERGWERK



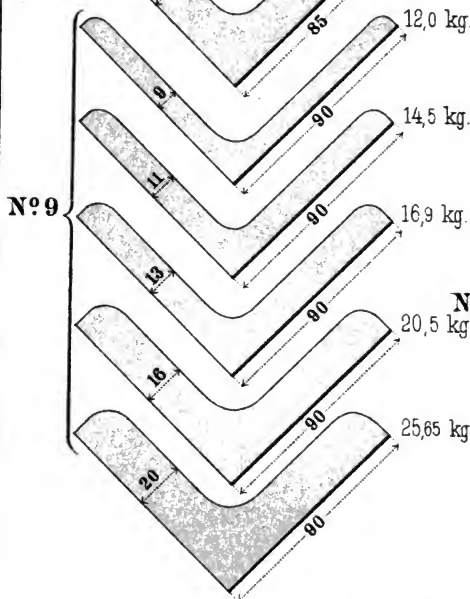
Die Maasse sind Millimeter.-Die Gewichte v



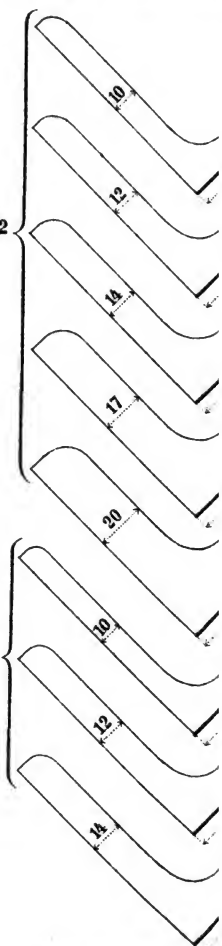
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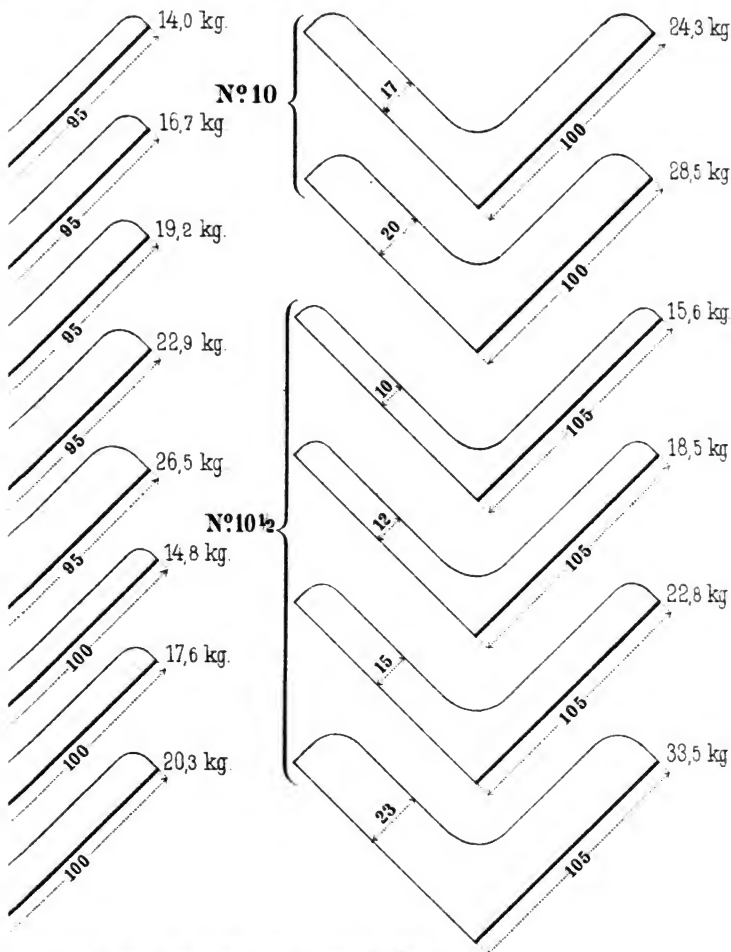
N° 9 1/2



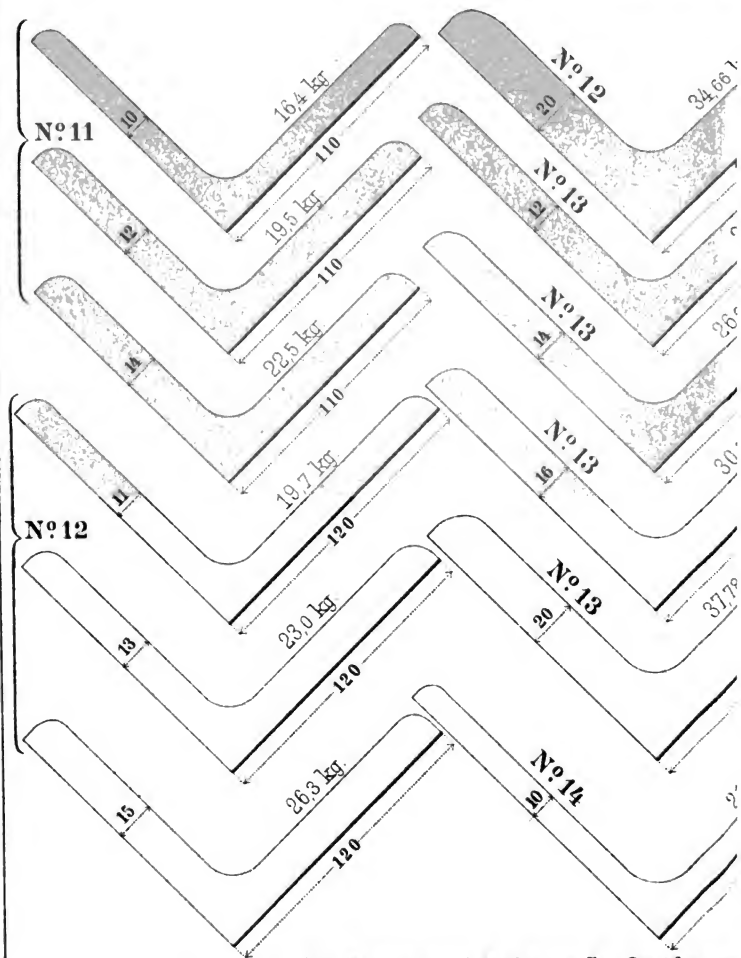
N° 10



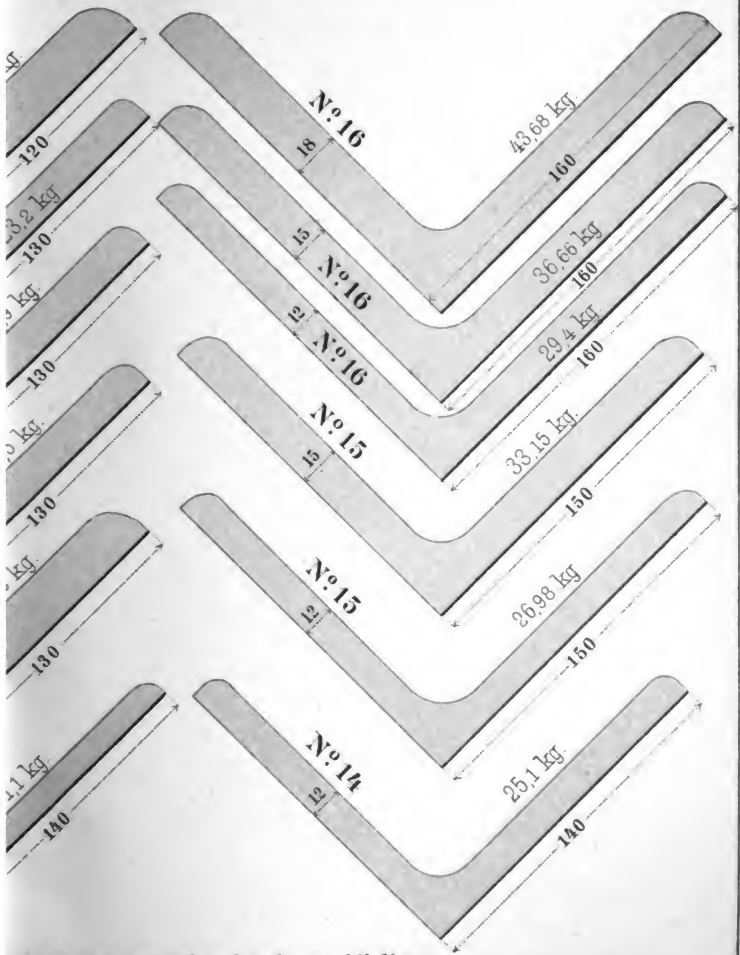
Die Maasse sind Millimeter. Die Gewichte ver



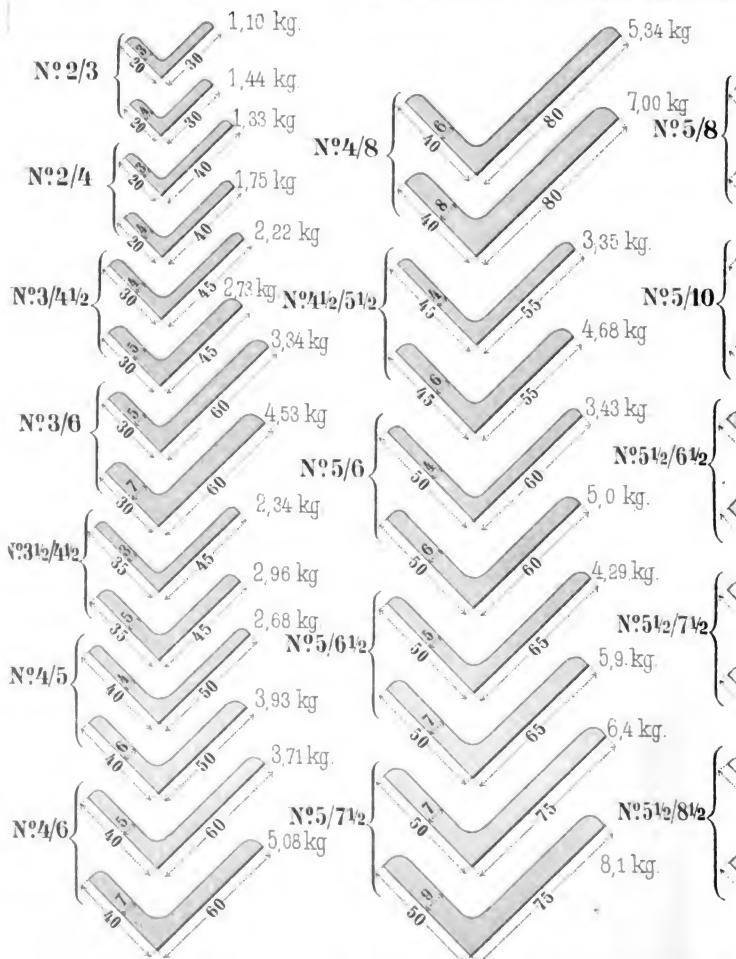
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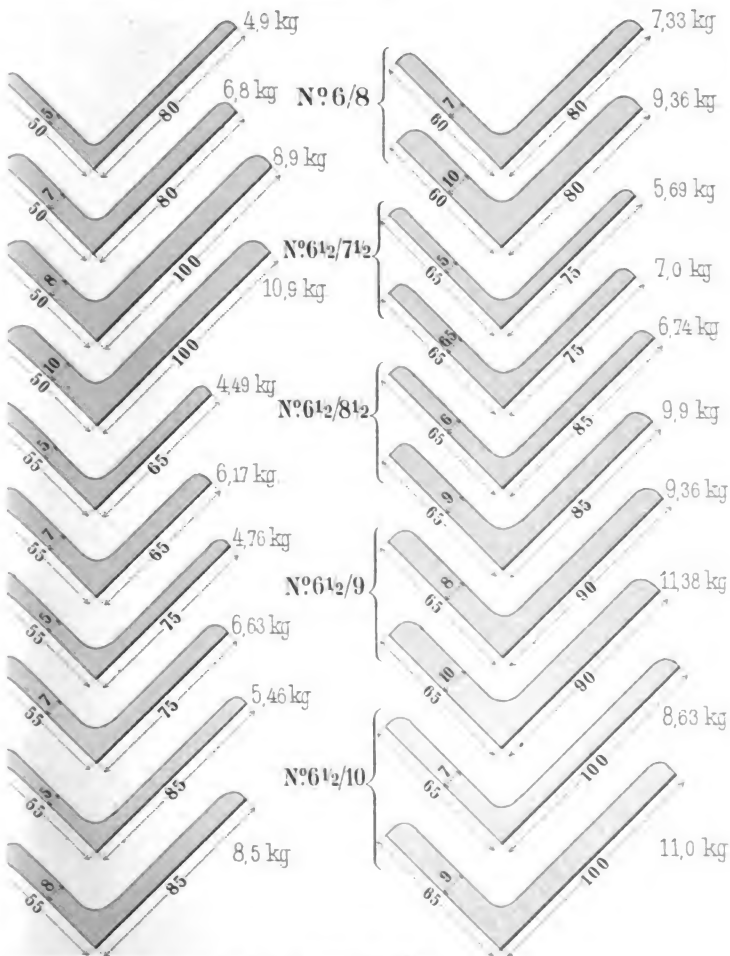
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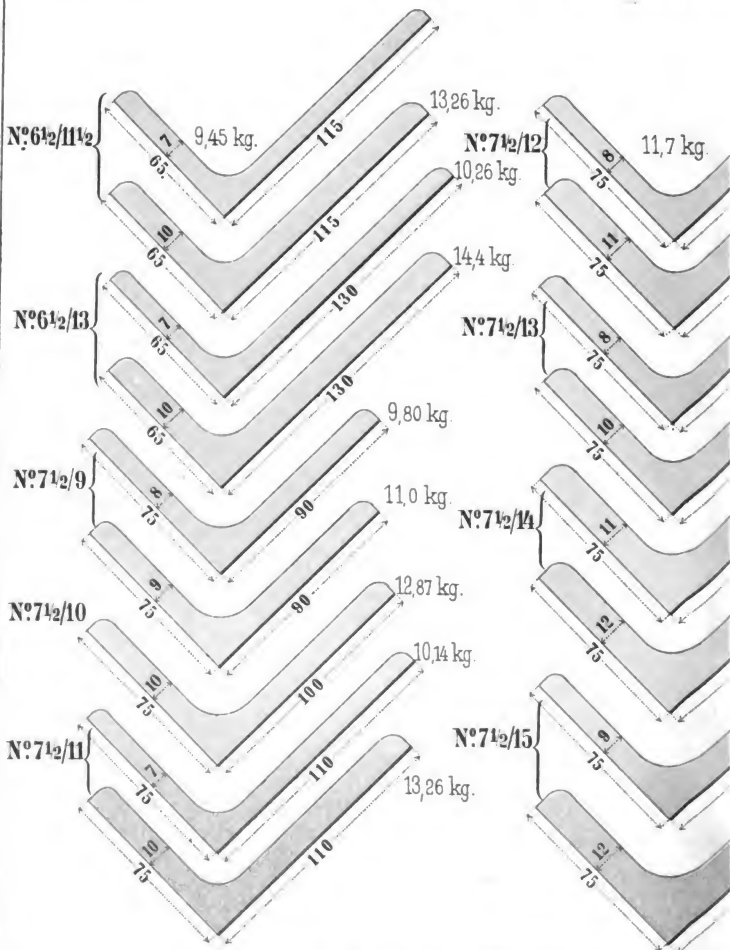
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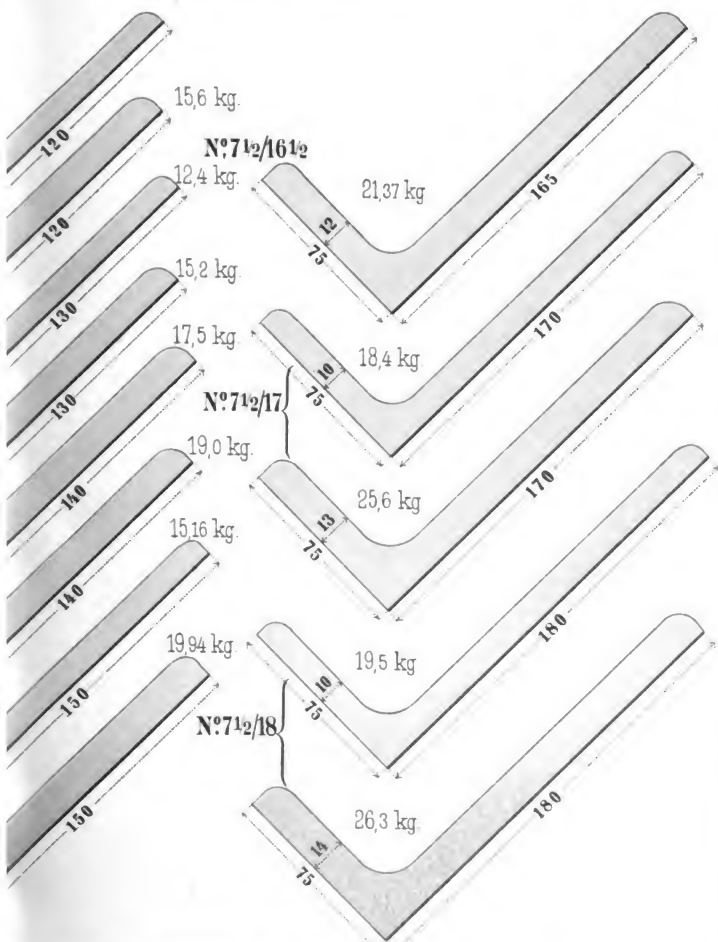
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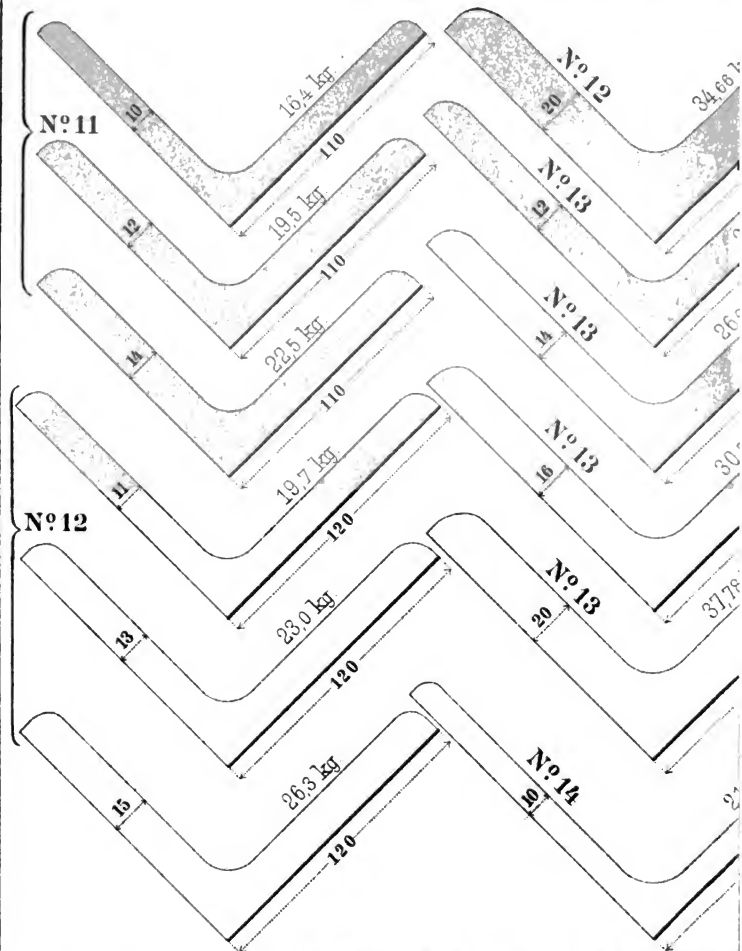
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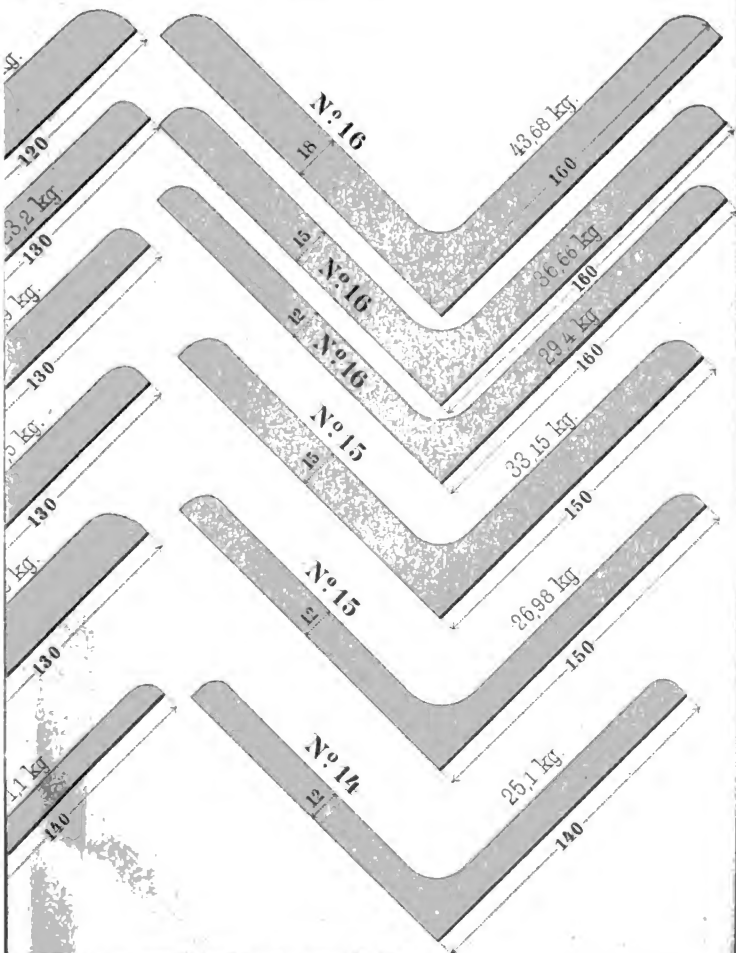
Die Maasse sind Millimeter. Die Gewichte von



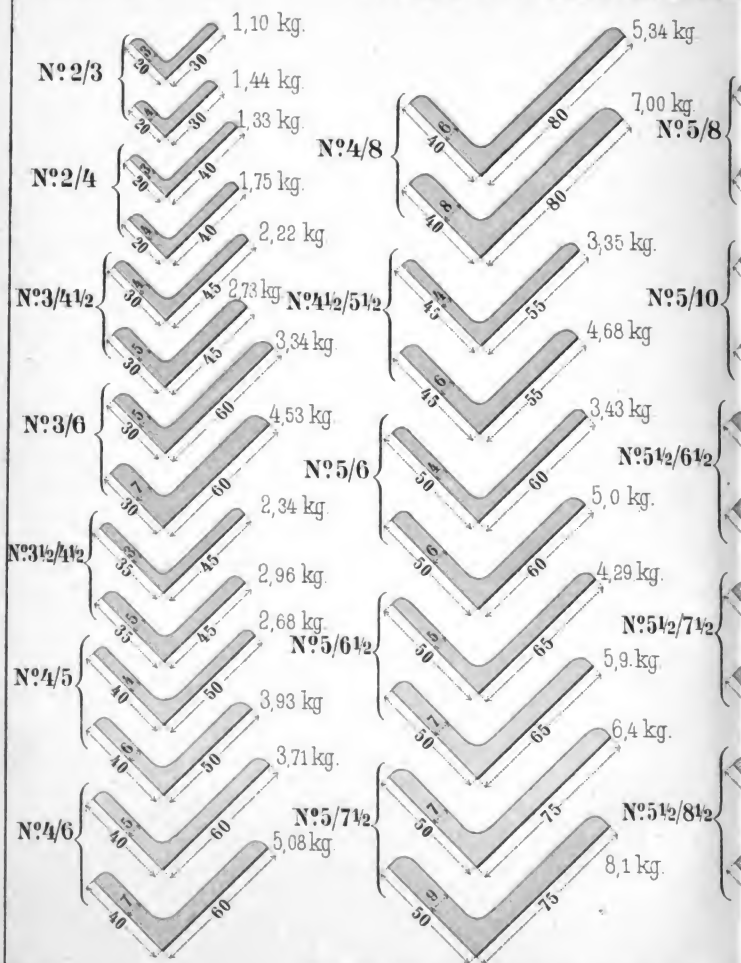
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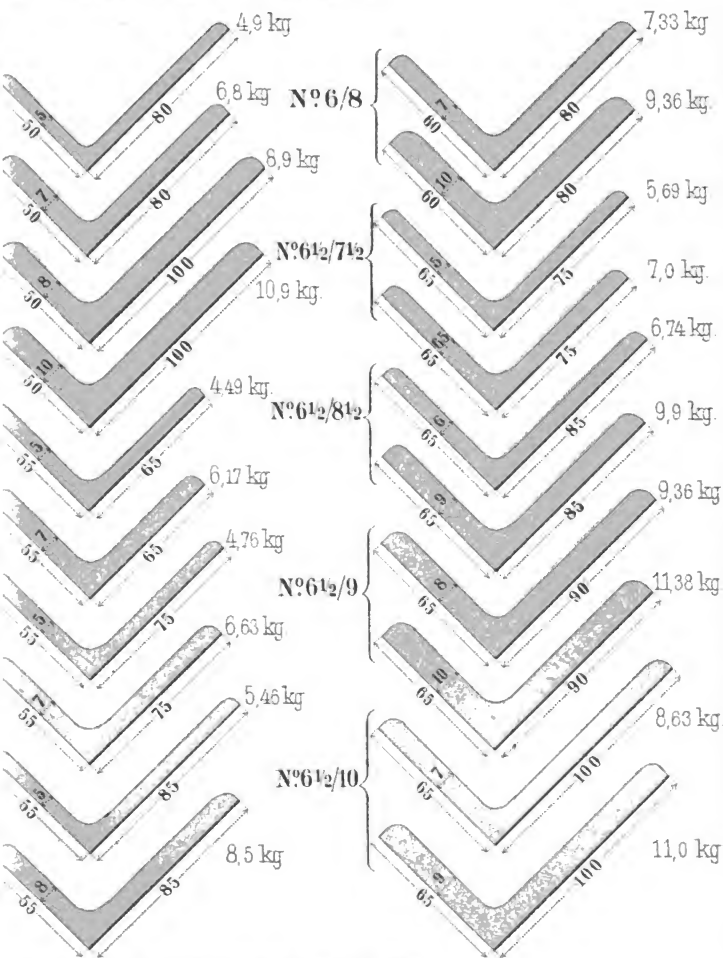
Die Maasse sind Millimeter. Die Gewichte vers



Stehen sich nur annähernd in kg. pro lfd. Meter.



Die Maasse sind Millimeter. Die Gewichte von



stehen sich nur annähernd in kg. pro lfd. Meter.

1

N

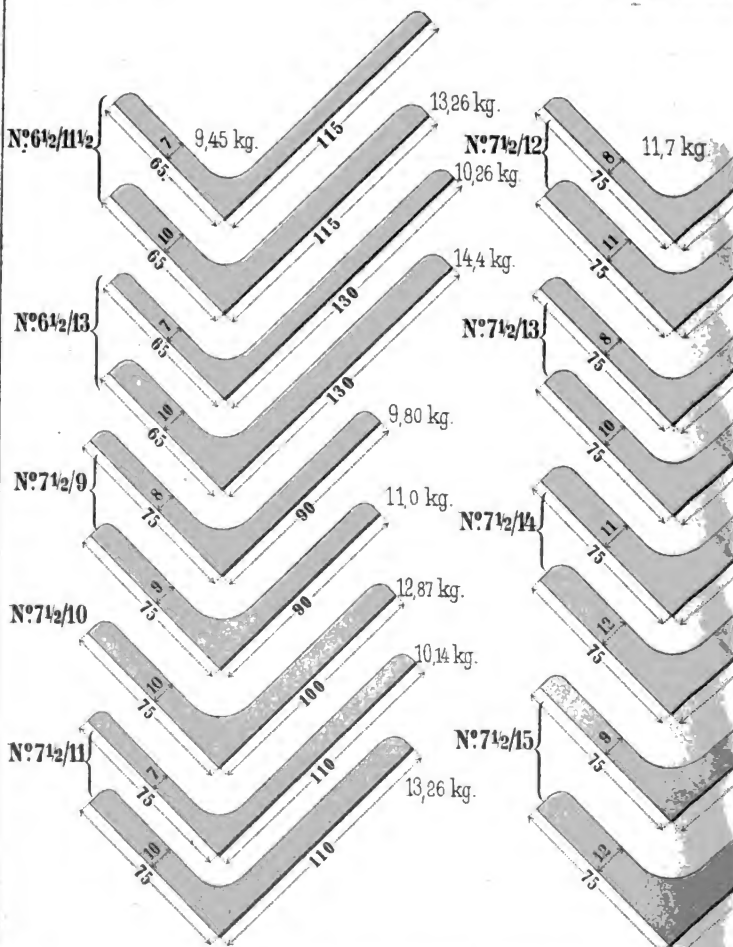
N°3

N°3

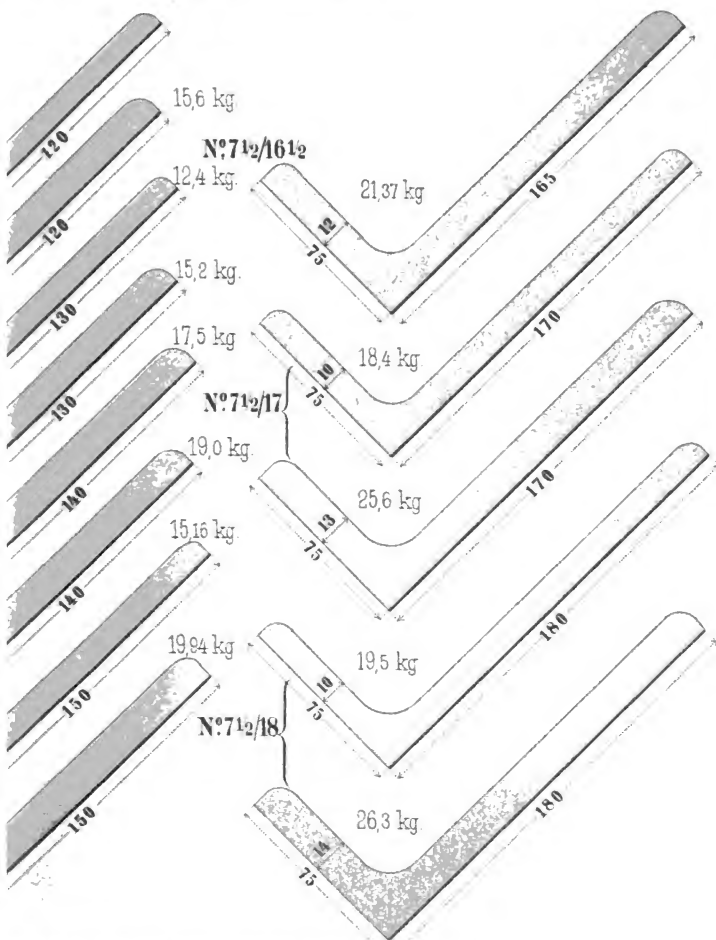
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N°4/5

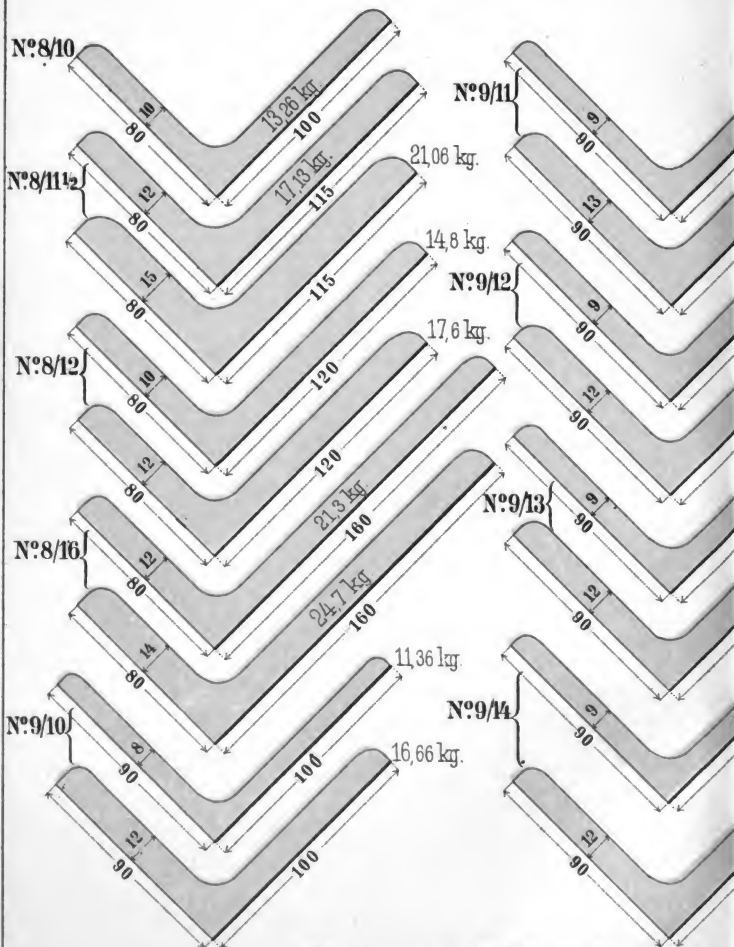
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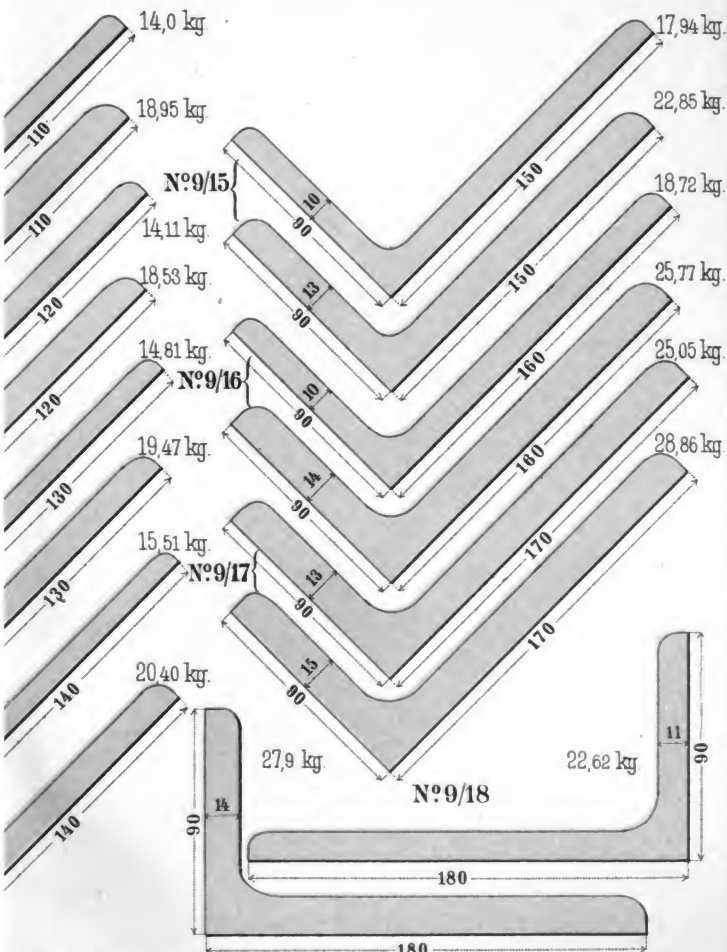
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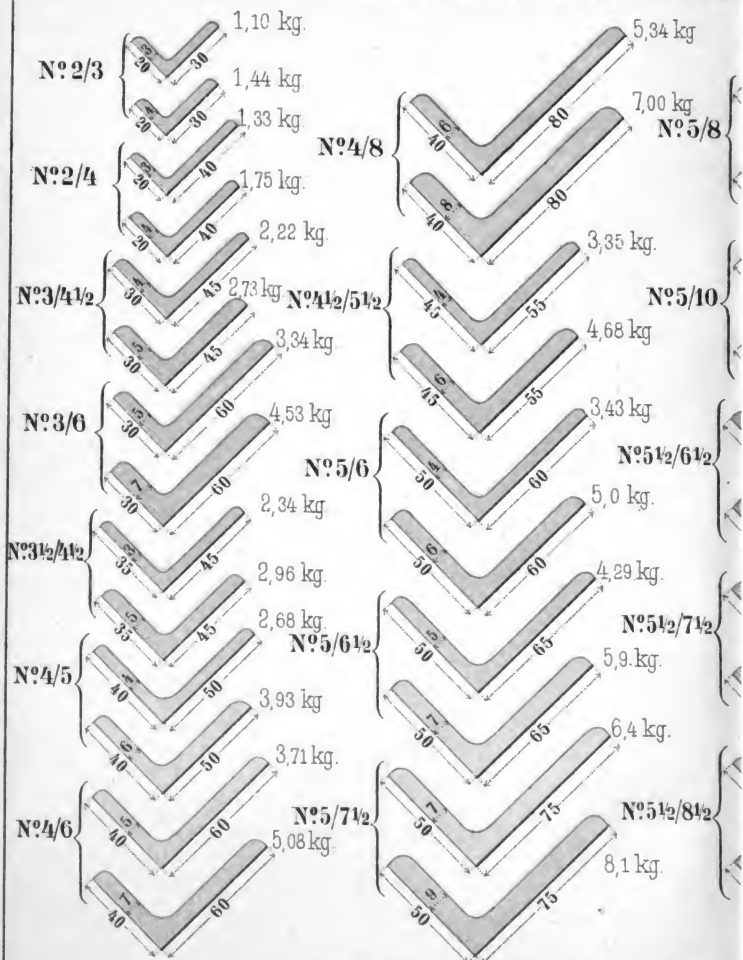
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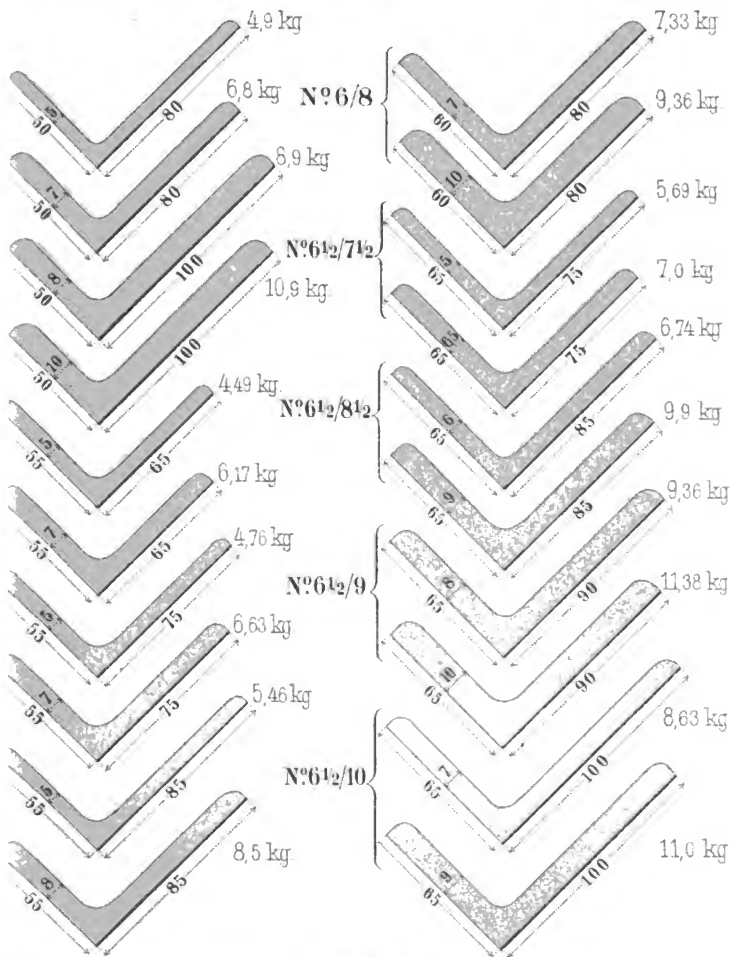
Die Maasse sind Millimeter-Die Gewichte in Kilogramm



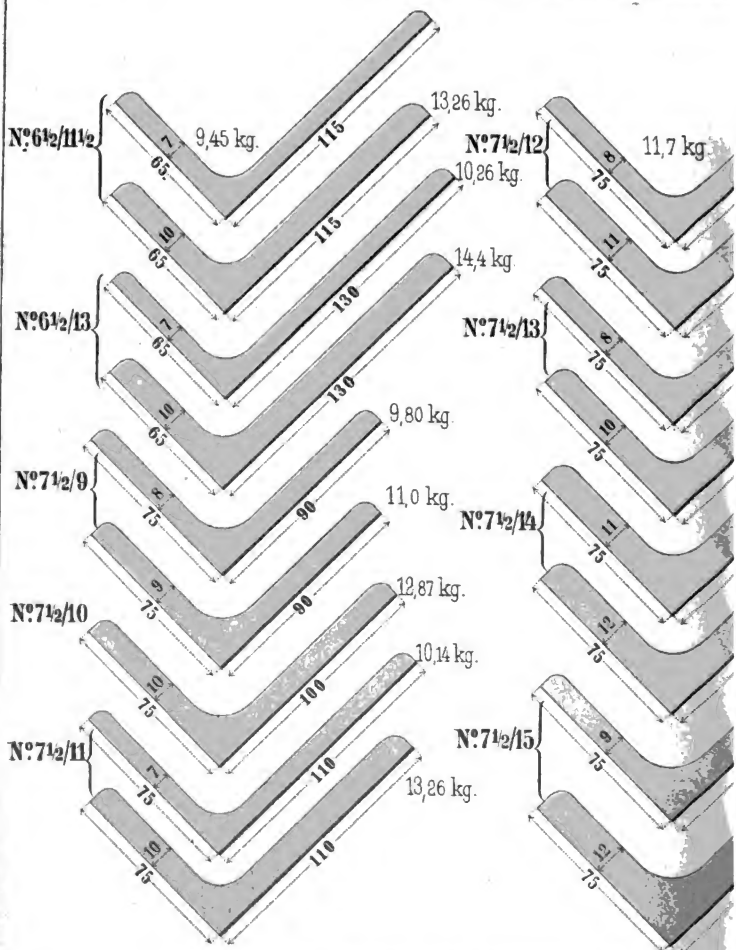
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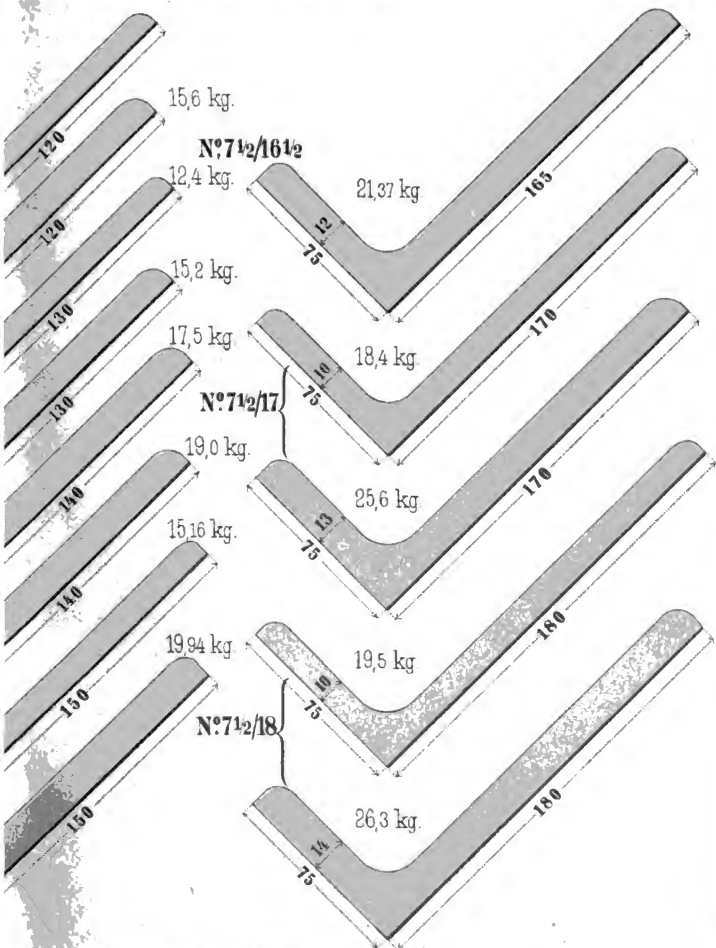
Die Maasse sind .Millimeter.-Die Gewichte von



stehen sich nur annähernd in kg. pro lfd. Meter:

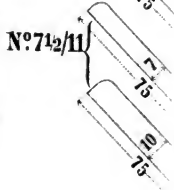
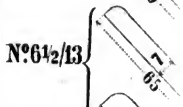


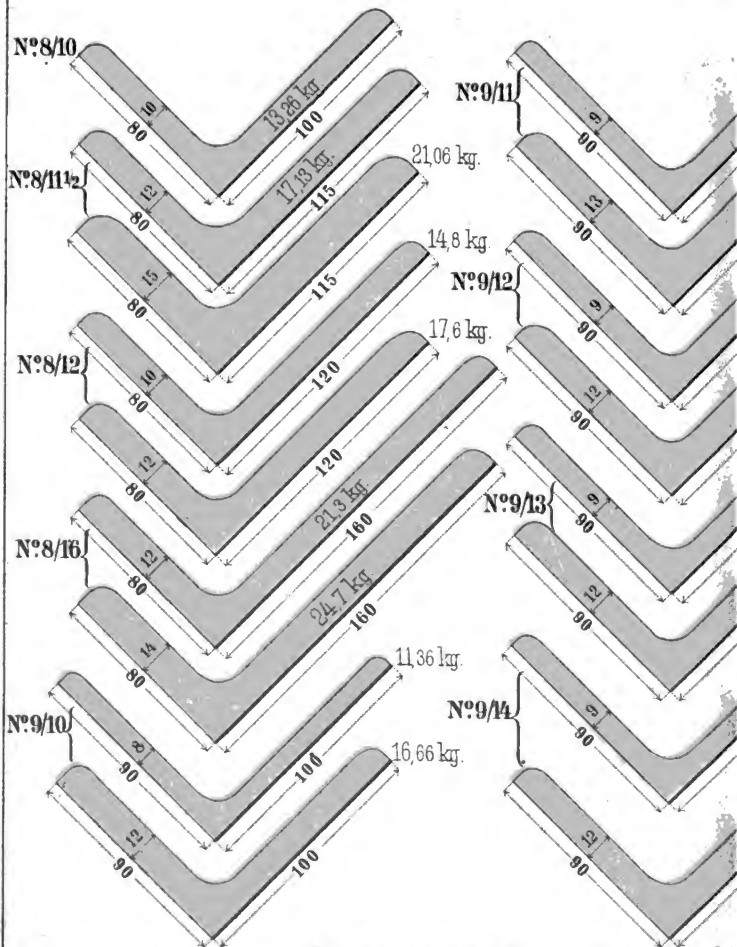
Die Maasse sind Millimeter. Die Gewichte ver



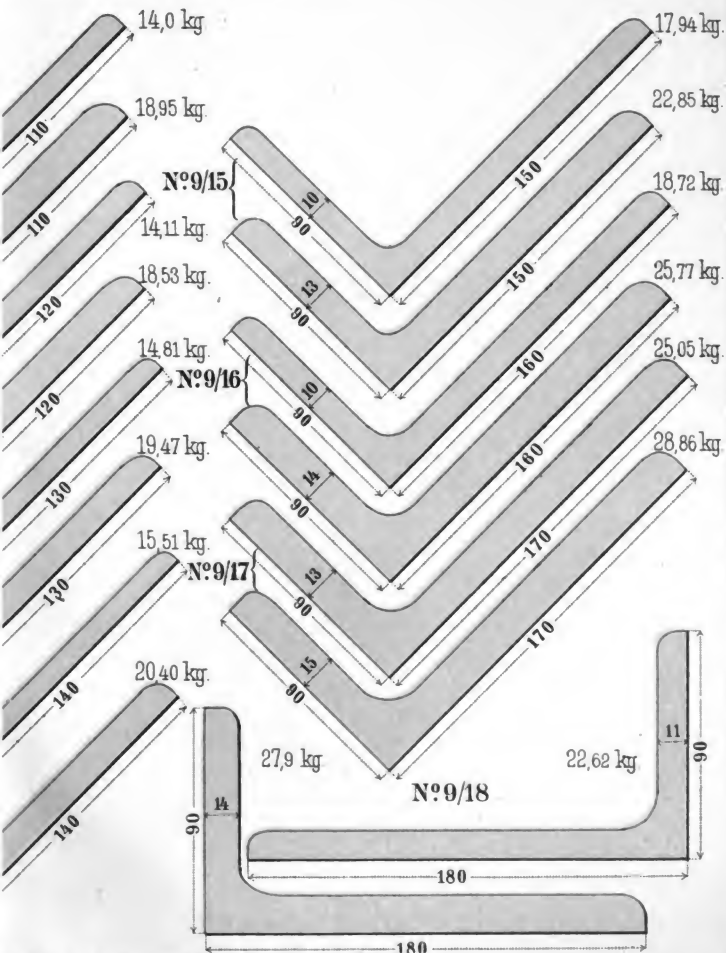
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Blatt 5.

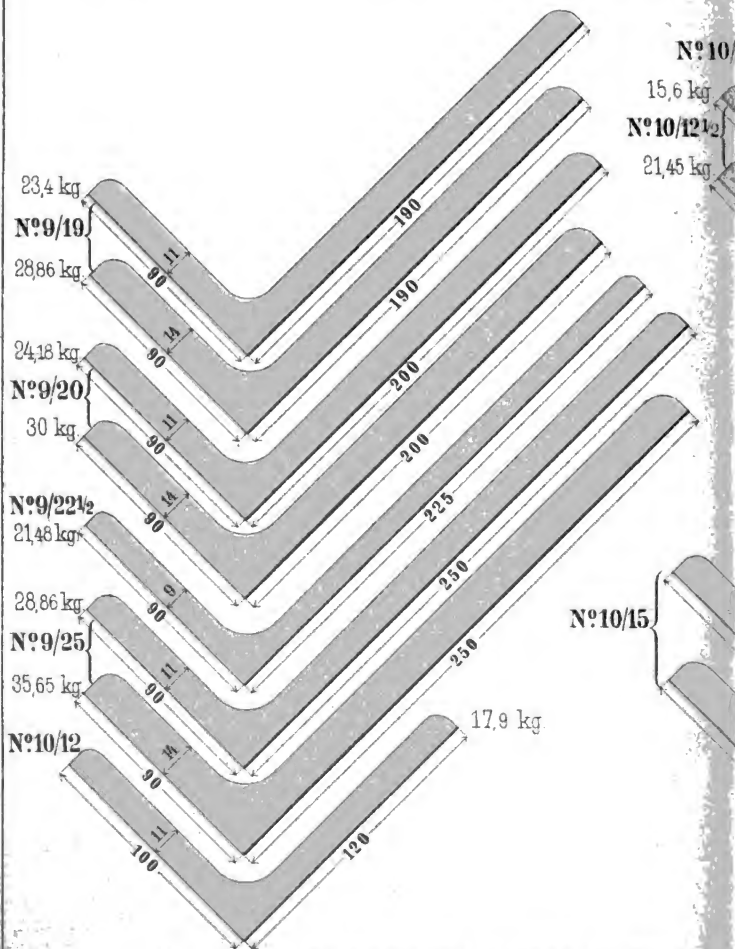




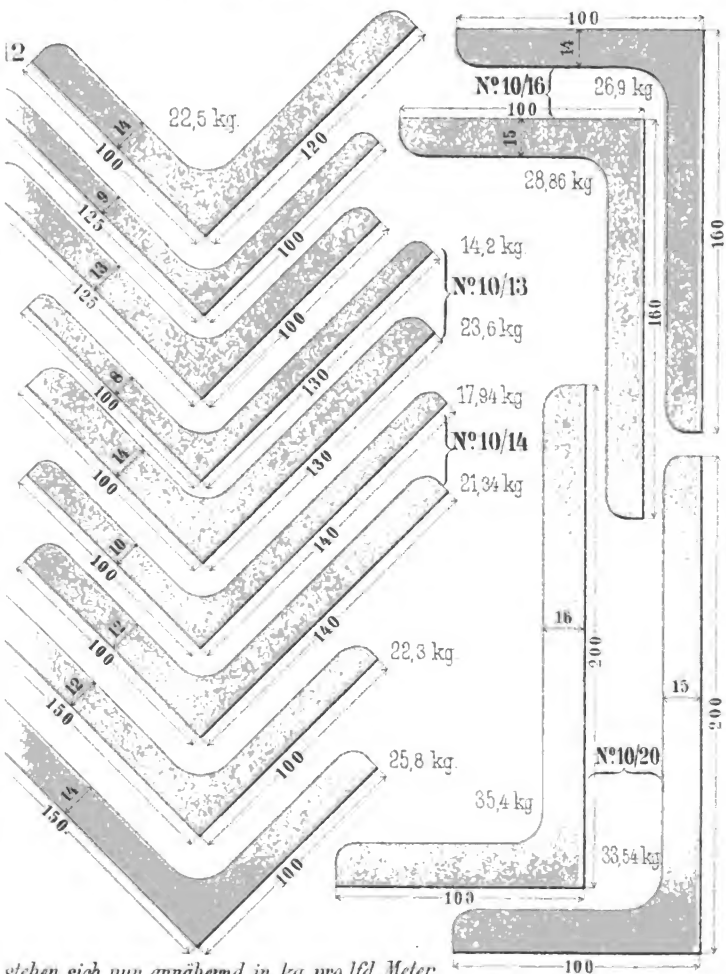
Die Maasse sind Millimeter-Die Gewichte in



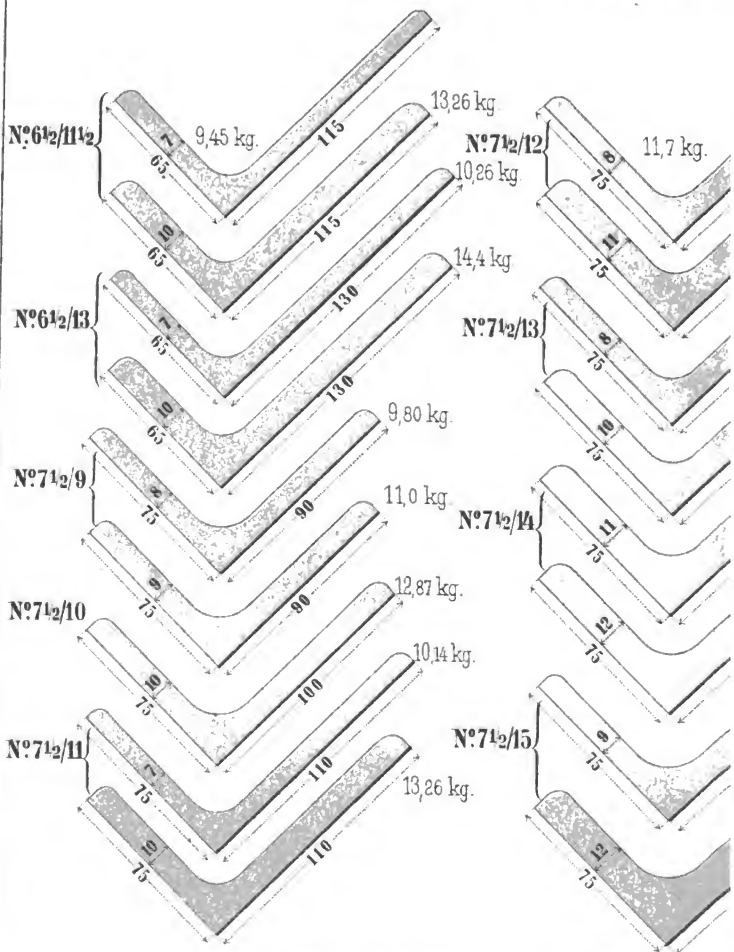
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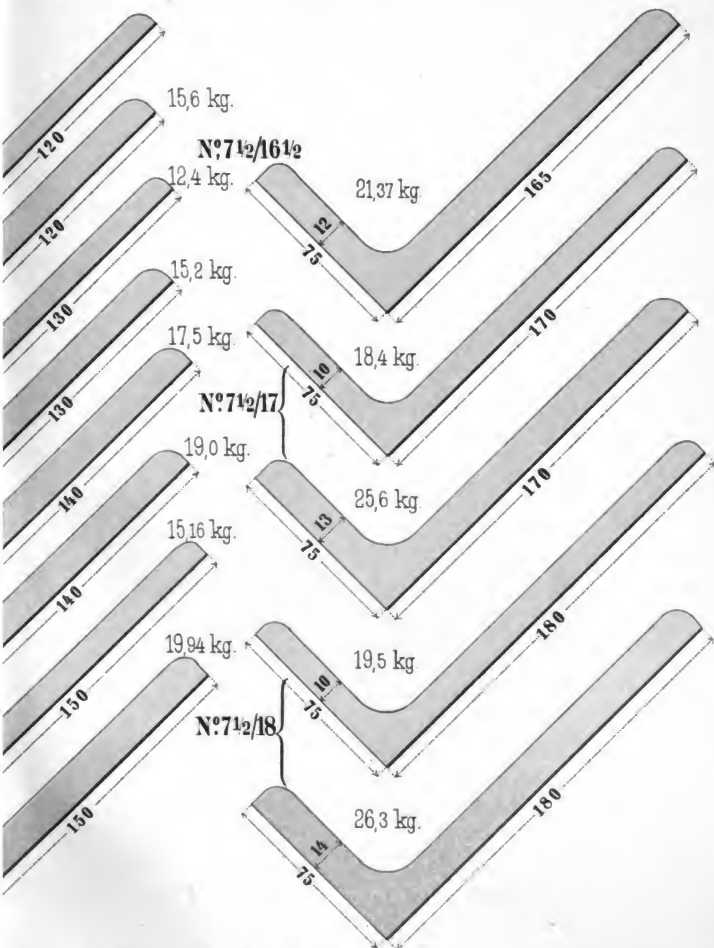
Die Maasse sind Millimeter. Die Gewichte ver



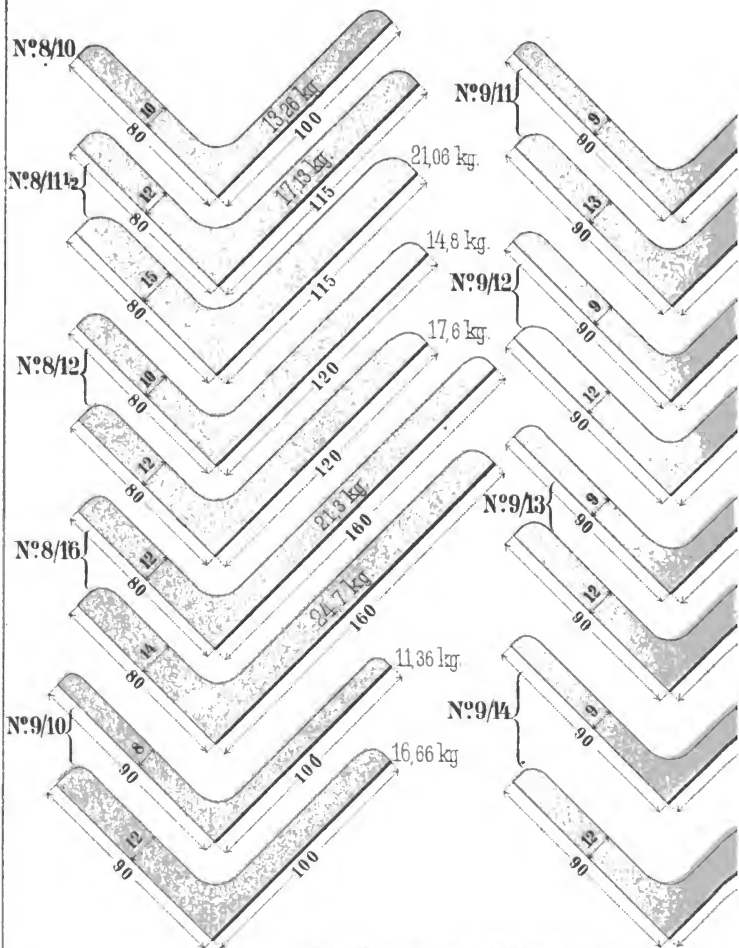
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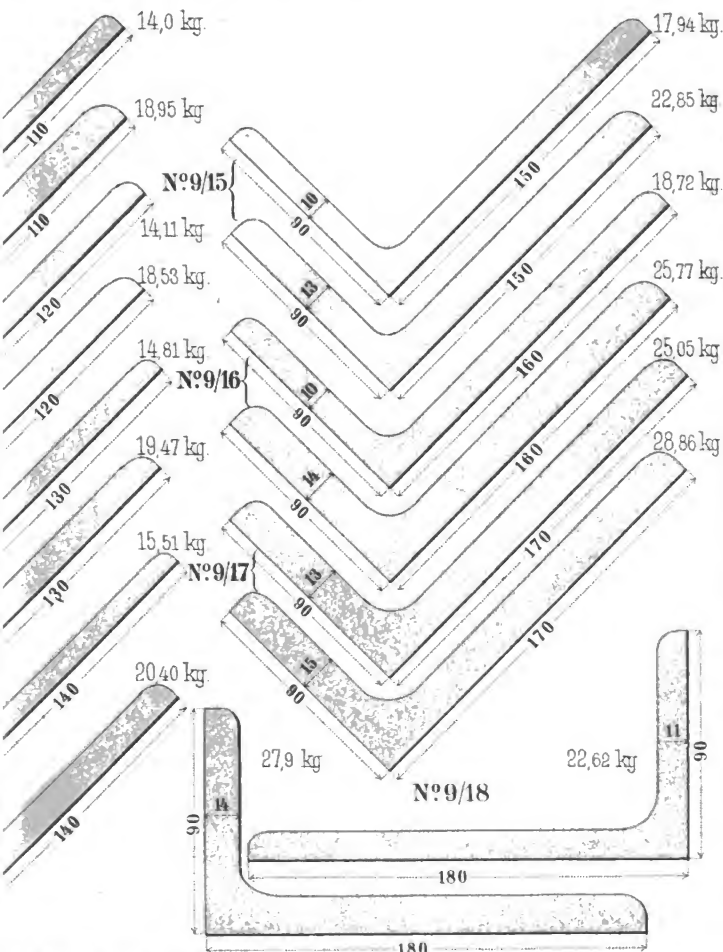
Die Maasse sind Millimeter. Die Gewichte per



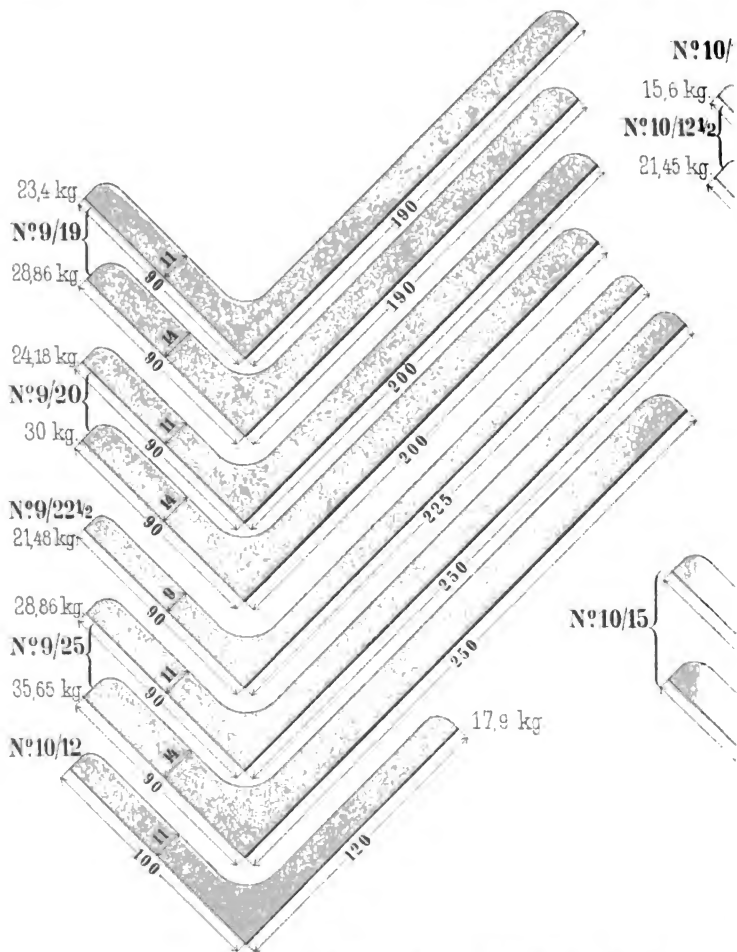
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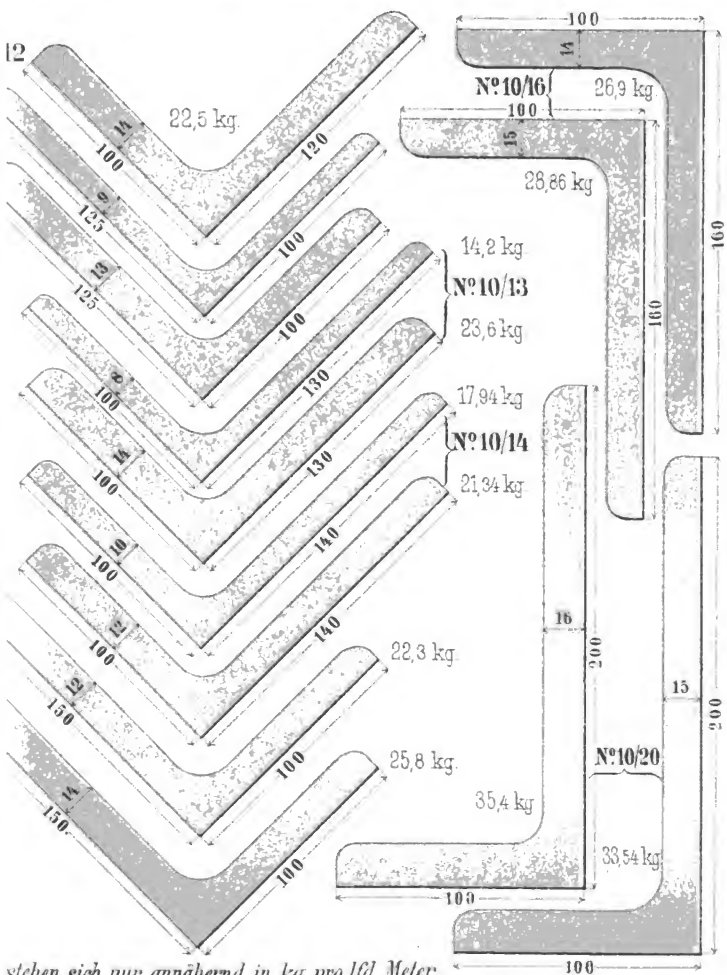
Die Maasse sind Millimeter. Die Gewichte in kg.



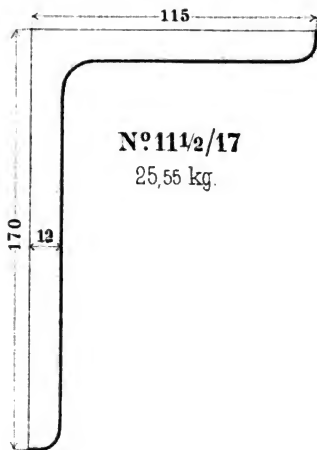
stehen sich nur annähernd in kg. pro lfd. Meter.



Die Maasse sind Millimeter. Die Gewichte in

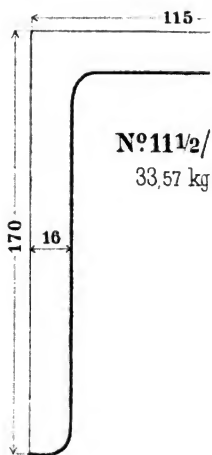


stehen sich nur annähernd in kg. pro lfd. Meter.



N° 11 1/2 / 17

25,55 kg.



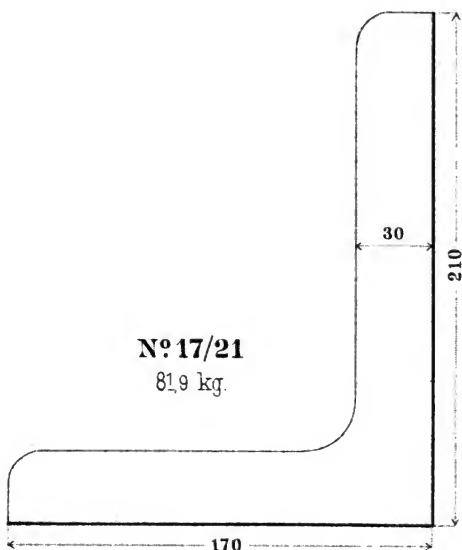
N° 11 1/2 / 18

33,57 kg.

Die Maasse sind Millimeter. Die Gewichte pers



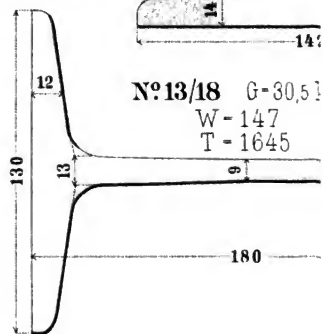
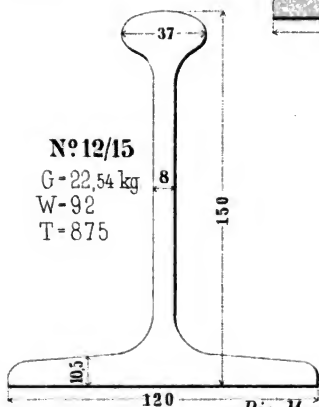
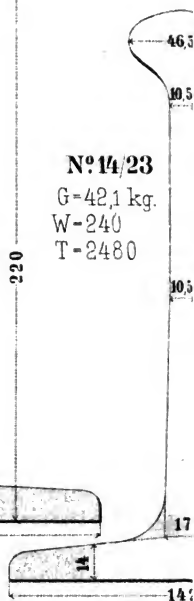
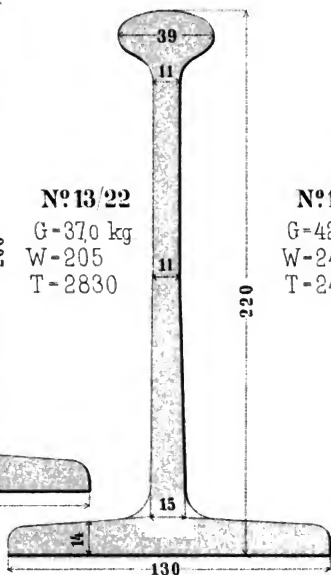
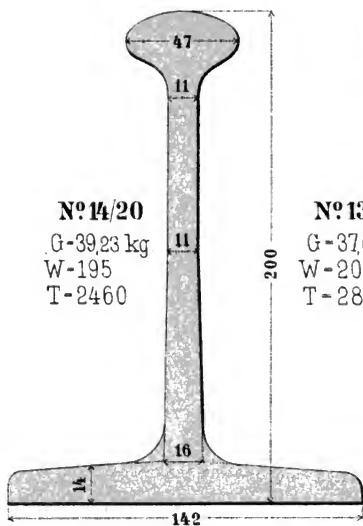
17



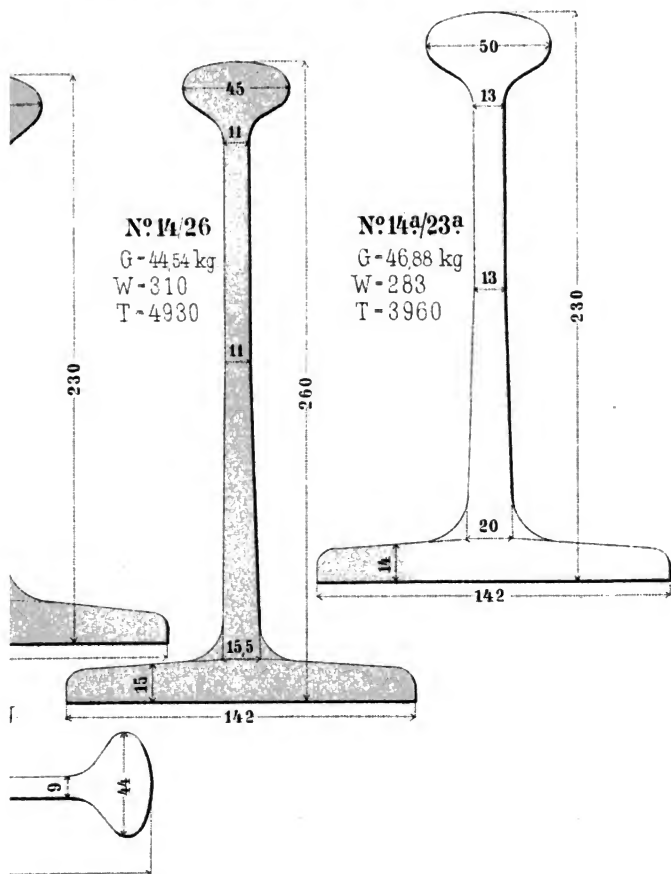
N^o 17/21

81,9 kg.

geben sich nur annähernd in kg. pro lfd. Meter.

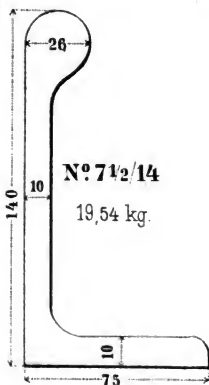
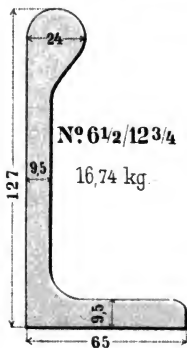
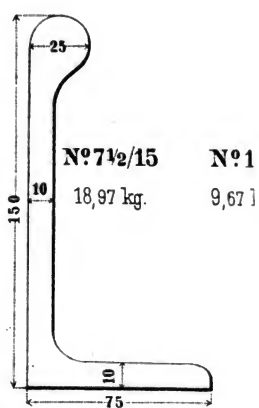
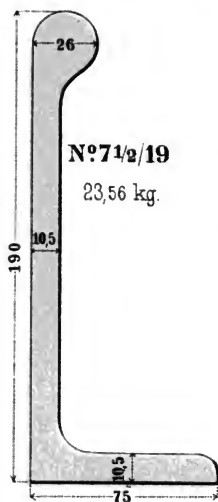


Die Maasse sind Millimeter. Die Gewichte vers



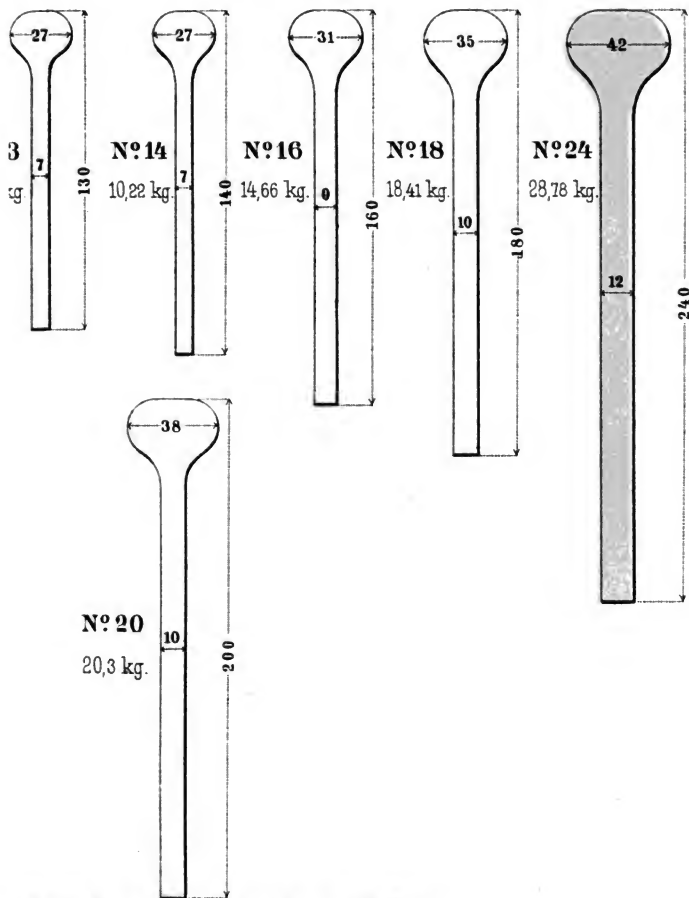
hen sich nur annähernd in kg. pro lfd. Meter.

Winkelbulbs.



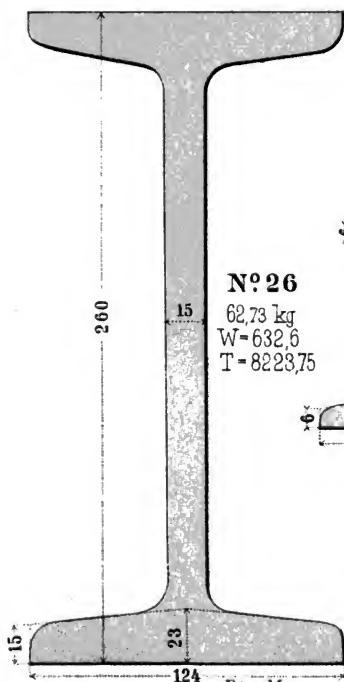
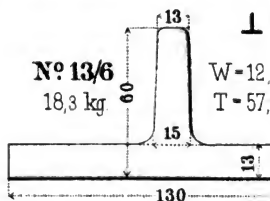
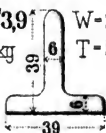
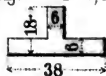
Die Maasse sind Millimeter. Die Gewichte vers

Flachbulbs.

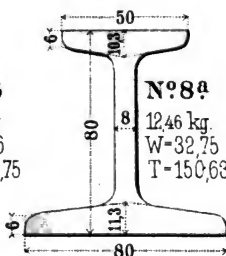


stehen sich nur annähernd in kg. pro lfd. Meter.

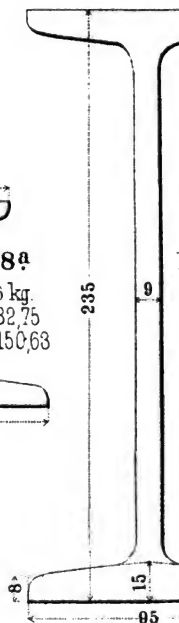
N^o3/8/18 W-0,46 N^o3,9/3,9 W-2,20
2,34 kg. T-0,598 3,37 kg T-5,94



N^o26
62,73 kg
W-632,6
T-8223,75



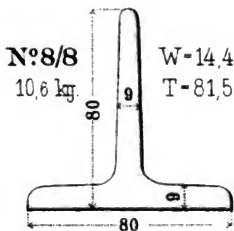
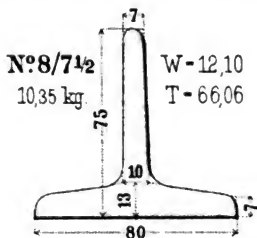
N^o8a
12,46 kg
W-32,75
T-150,63



Die Maasse sind Millimeter. Die Gewichte in

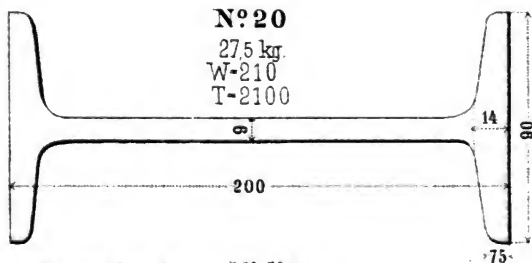
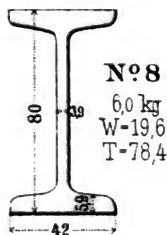
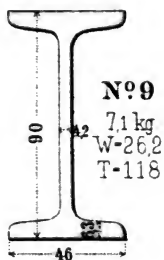
Eisen.

39
9

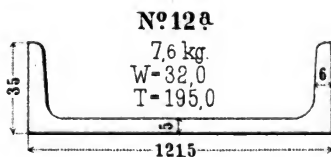
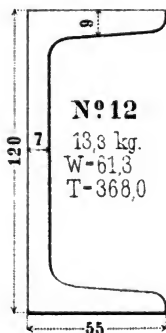
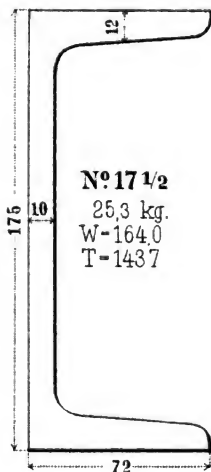
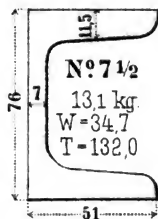
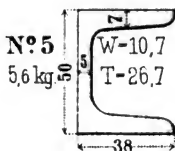
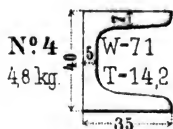


I Eisen.

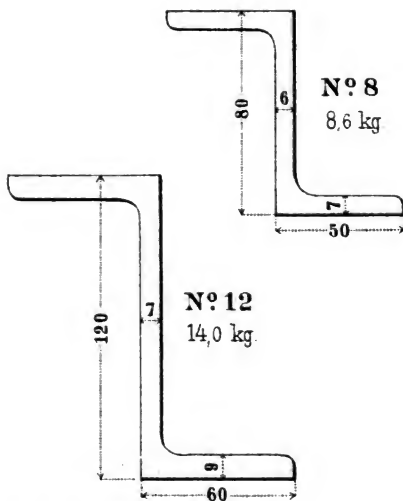
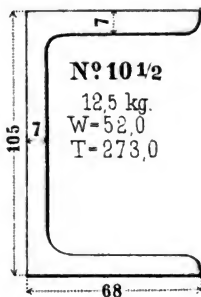
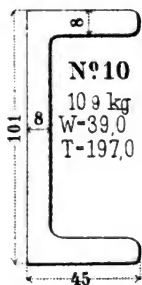
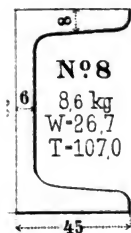
N°23 1/2
319 kg.
7-285
-3348



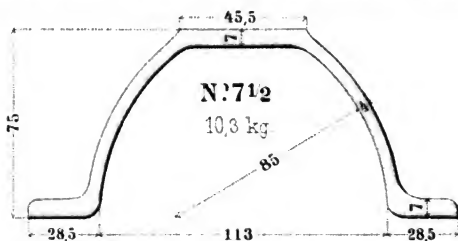
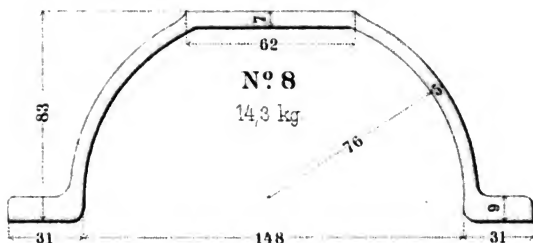
stehen sich nur annähernd in kg. pro lfd. Meter:



Die Maasse sind Millimeter. Die Gewichte ver



stehen sich nur annähernd in kg. pro lfd. Meter.



N°1 0,72 kg.



N°2 0,66 kg.



N°3 0,78 kg.



N°4 1,03 kg.



N°5 1,25 kg.



N°6 1,4 kg.



N°7 1,5 kg.



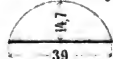
N°8 2,3 kg.



N°15 2,6 kg.



N°9 3,0 kg.



N°10 0,88 kg.



N°11 1,24 kg.



N°12 2,06 kg.



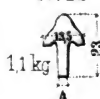
N°13 4,7 kg.



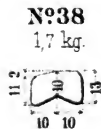
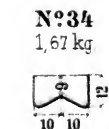
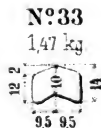
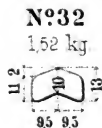
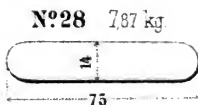
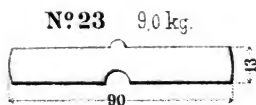
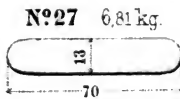
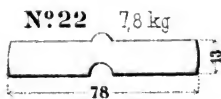
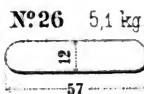
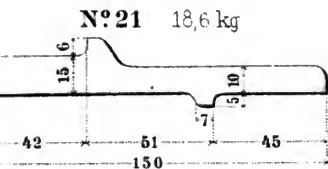
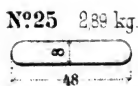
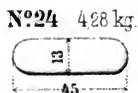
N°14 12,1 kg.



N°18



Die Maasse sind Millimeter: Die Gewichte in Kilogramm



stehen sich nur annähernd in kg. pro lfd. Meter.

Blatt 14.

HOERDER BERGWERK

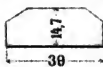
N^o1 35 kg.



N^o2 37 kg.



N^o3 43 kg.



N^o4 48 kg.



N^o5 6,14 kg.



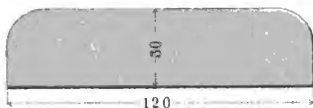
N^o6 6,46 kg.



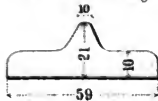
N^o7 7,4 kg.



N^o8 27,3 kg.



N^o9 5,47 kg.

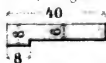


N^o12 6,0 kg.



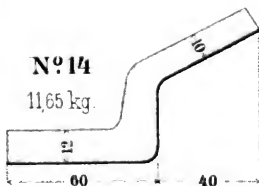
N^o13

2,0 kg.



N^o14

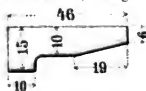
11,65 kg.



N^o15 3,54 kg.

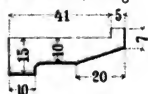


N^o16 3,62 kg.

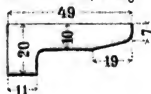


Die Maasse sind Millimeter. Die Gewichte in

N^o17 3,71 kg.



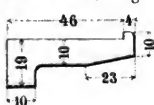
N^o18 4,54 kg



N^o19 4,0 kg.



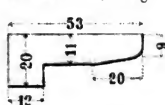
N^o20 4,3 kg.



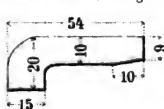
N^o21 5,1 kg



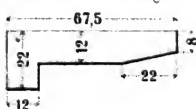
N^o22 5,23 kg.



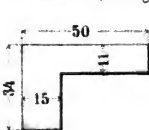
N^o23 4,62 kg



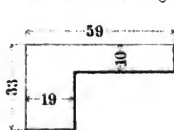
N^o24 7,45 kg



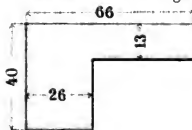
N^o26 6,96 kg.



N^o27 8,0 kg



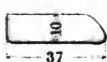
N^o28 12,16 kg



N^o29 2,03 kg.



N^o30 2,81 kg



Nº 1



9,2 kg.

Nº 2



16,0 kg.

Nº 3



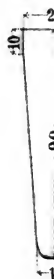
17,0 kg.

Nº 4



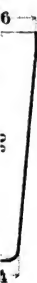
16,57 kg.

Nº 5



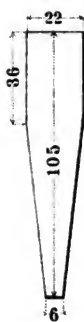
14,5 kg.

Nº 5



13,6 kg.

Nº 6



13,6 kg.

Nº 7



14,7 kg.

Nº 8



17,77 kg.

Nº 9



14,8 kg.

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

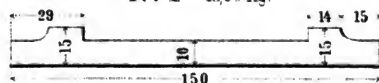
$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

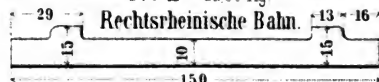
$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

N^o 1 12,88 kg.

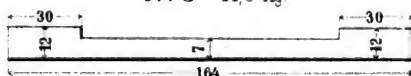


N^o 2 12,80 kg.



Rechtsrheinische Bahn.

N^o 3 11,3 kg.

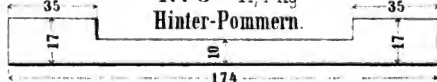


N^o 4 16,4 kg.



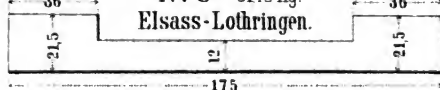
Braunschweig.

N^o 5 17,4 kg.



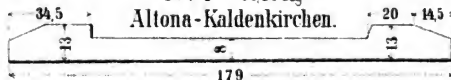
Hinter-Pommern.

N^o 6 21,72 kg.



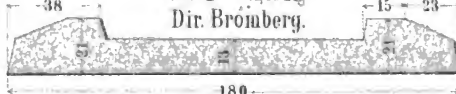
Elsass-Lothringen.

N^o 7 13,26 kg.



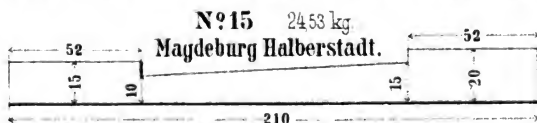
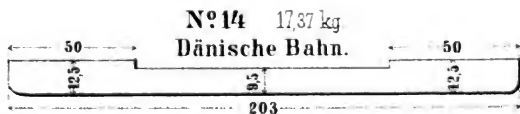
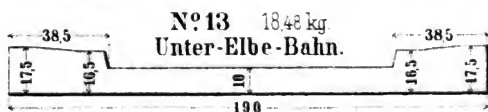
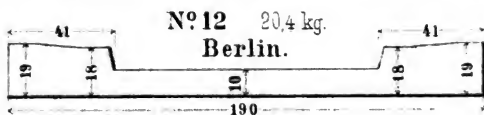
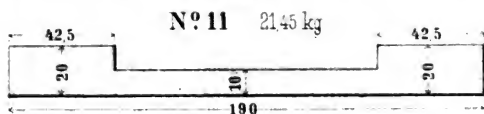
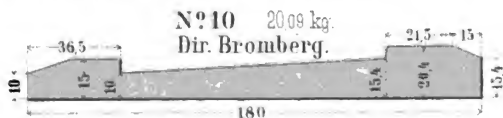
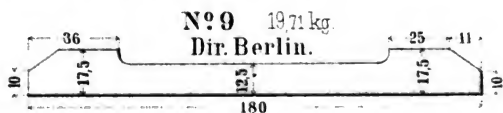
Altona-Kaldenkirchen.

N^o 8 21,14 kg.



Dir. Brönberg.

Maasse sind Millimeter. Die Gewichte verste.



ben sich nur annähernd in kg. pro lfd. Meter:

1. *Chlorophyll a* (Chl a)

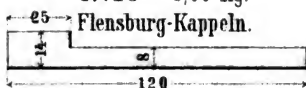
2. *Chlorophyll b* (Chl b)

3. *Chlorophyll c* (Chl c)

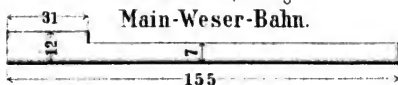
4. *Chlorophyll d* (Chl d)

5. *Chlorophyll e* (Chl e)

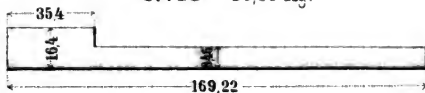
N^o16 8,66 kg.



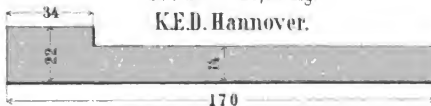
N^o17 9,67 kg.



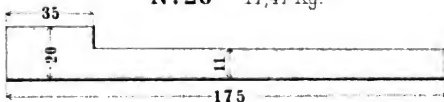
N^o18 13,36 kg.



N^o19 20,68 kg.



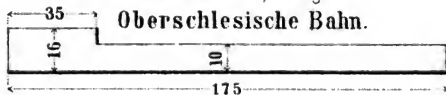
N^o20 17,47 kg.



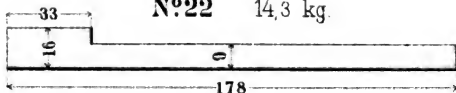
Die Maasse sind Millimeter. Die Gewichte ver

Nº 21 15,29 kg.

Oberschlesische Bahn.

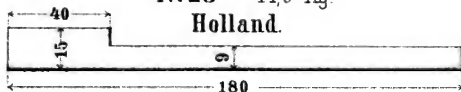


Nº 22 14,3 kg.



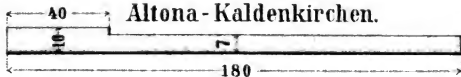
Nº 23 14,5 kg.

Holland.



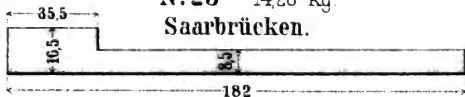
Nº 24 10,76 kg.

Altona - Kaltenkirchen.



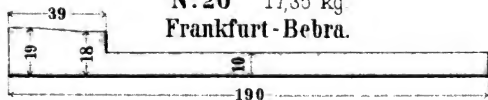
Nº 25 14,28 kg.

Saarbrücken.



Nº 26 17,35 kg.

Frankfurt - Bebra.



stehen sich nur annähernd in kg. pro lfd. Meter.

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations

2. The second part is devoted to the study of the properties of the solution of the system of equations

3. The third part is devoted to the study of the properties of the solution of the system of equations

4. The fourth part is devoted to the study of the properties of the solution of the system of equations

5. The fifth part is devoted to the study of the properties of the solution of the system of equations

6. The sixth part is devoted to the study of the properties of the solution of the system of equations



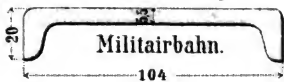
N^o 1 4,25 kg.



N^o 2 6,24 kg.



N^o 3 6,16 kg.



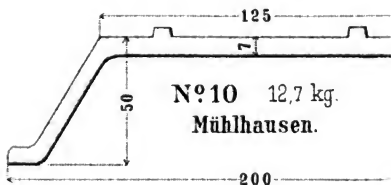
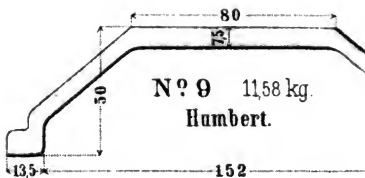
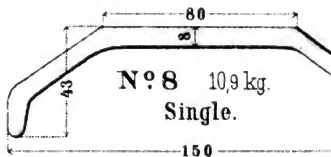
N^o 4 7,8 kg.



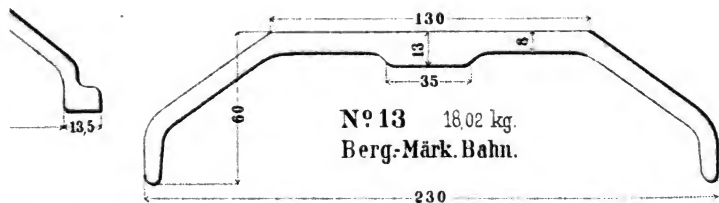
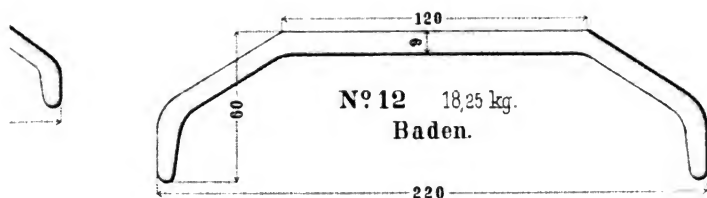
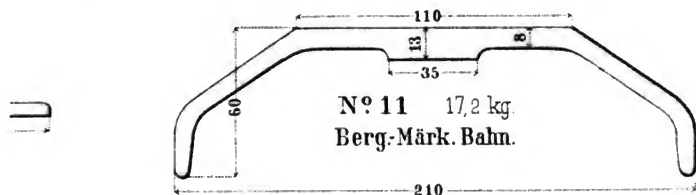
N^o 5 5,4 kg.



N^o 6 6,3 kg.

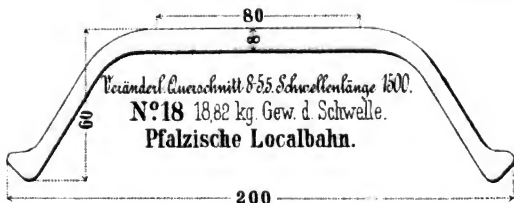
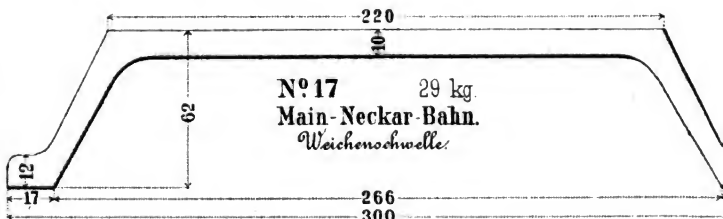
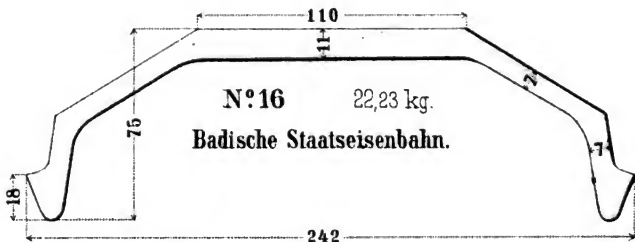
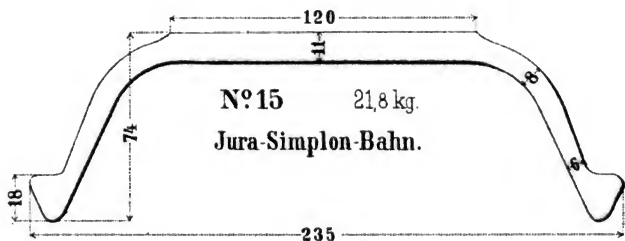


Die Maasse sind Millimeter. Die Gewichte ver-

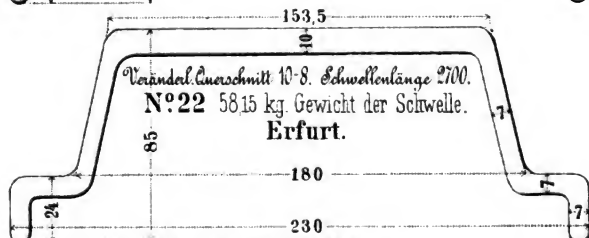
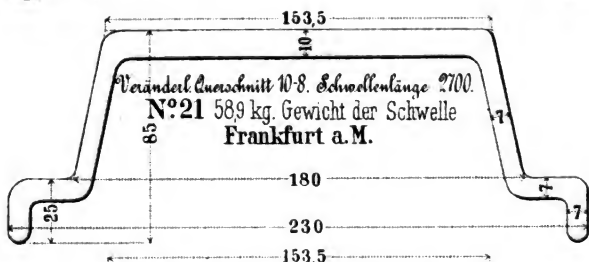
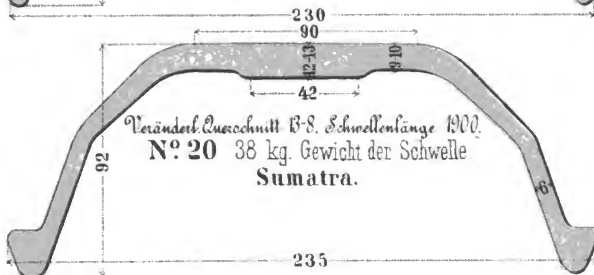
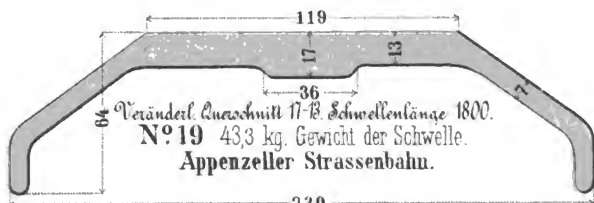


stehen sich nur annähernd in kg. pro lfd. Meter:

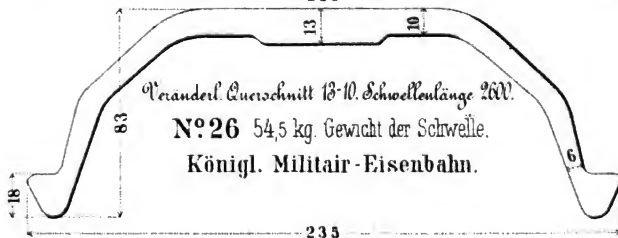
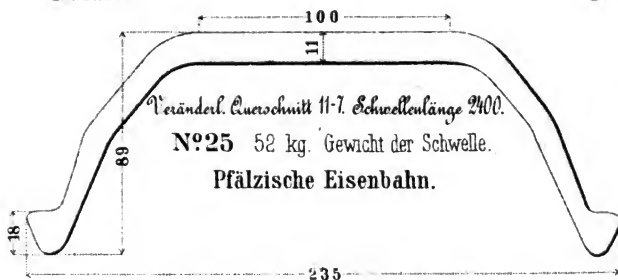
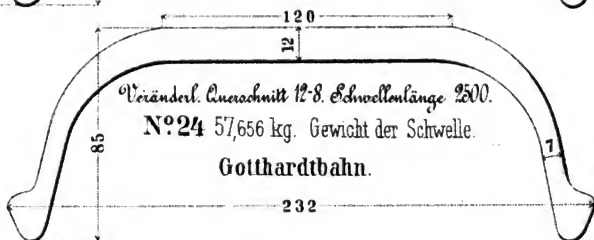
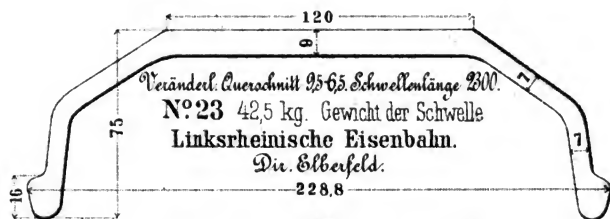




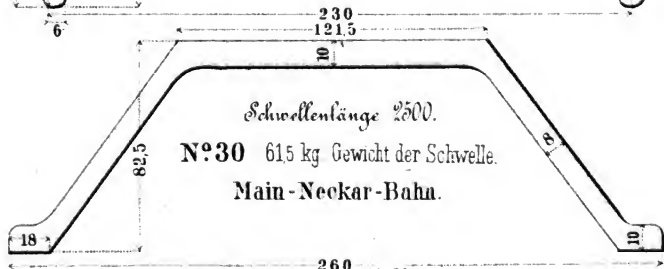
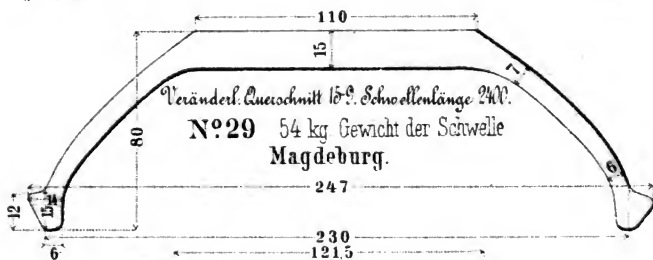
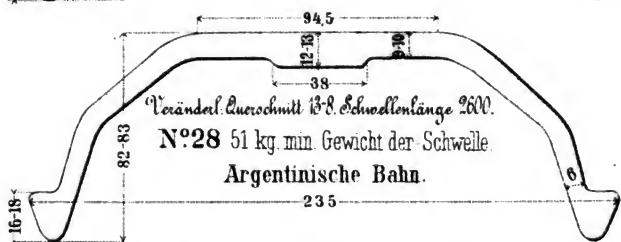
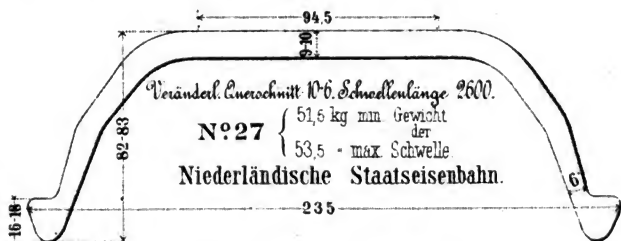
Die Maasse sind Millimeter. Die Gewichte ver



stehen sich nur annähernd in kg. pro lfd. Meter.



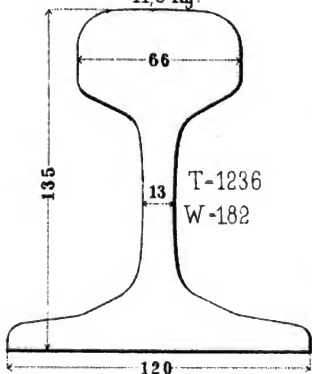
Die Maasse sind Millimeter-Die Gewichte in



stehen sich nur annähernd in kg. pro lfd. Meter.

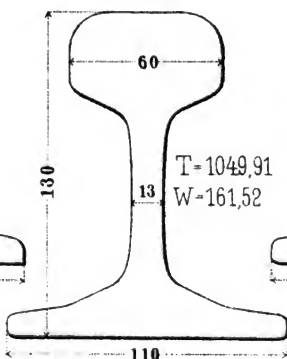
Jura Simplon.

41,8 kg.



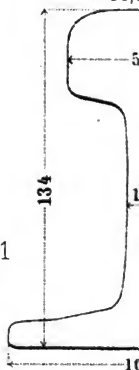
Gotthardbahn.

37,0 kg.



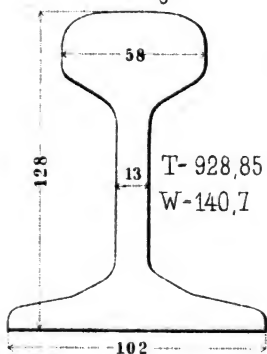
Staat

33,4



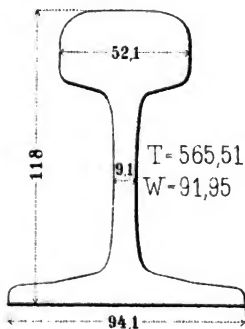
Holland.

33,3 kg.



Appenzeller-Strassenbahn.

25,8 kg.

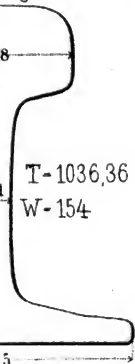


Schweizer

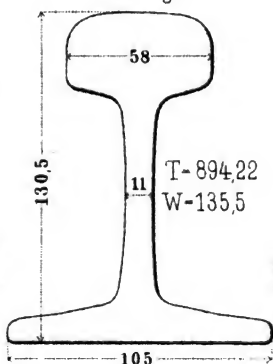
33,4



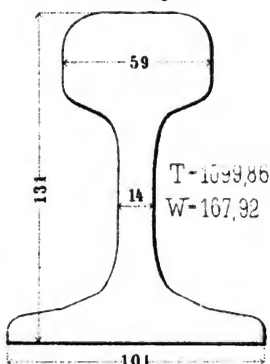
sbahn.
kg.



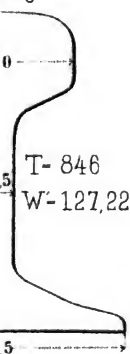
Staatsbahn.
31,5 kg.



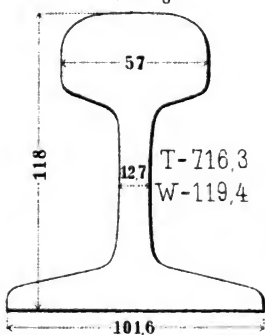
Elsass-Lothringen.
37,6 kg.



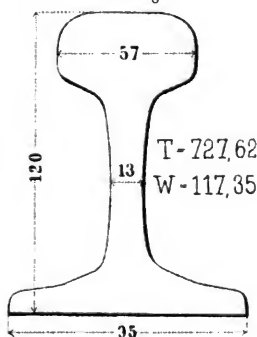
Westbahn.
kg.



Dänemark.
31,82 kg.

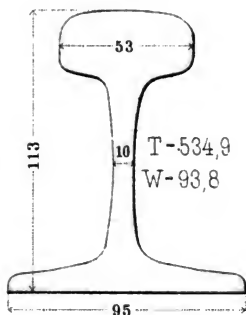


Oldenburg.
316 kg.



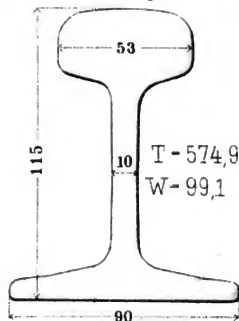
Secundärbahn.

24,3 kg.



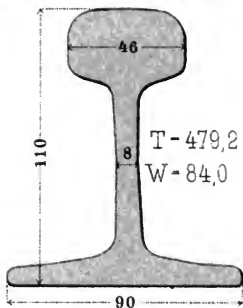
Farge-Vegesack.

rechth. 24,57 kg Dir. Köln.



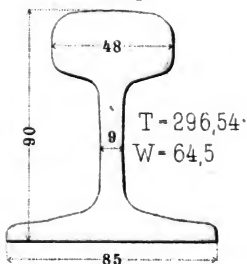
Münchener.

Local- und 22,0 kg. Strassenbahn.



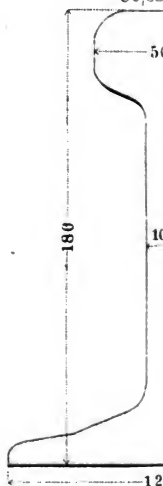
Rigibahn.

19,6 kg.



Reichs-E.

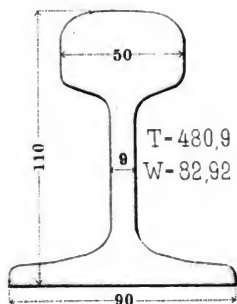
36,82



Die Maasse sind Millimeter. Die Gewichte ver

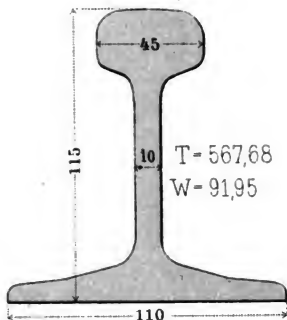
Viege - Zermatt.

24,2 kg.

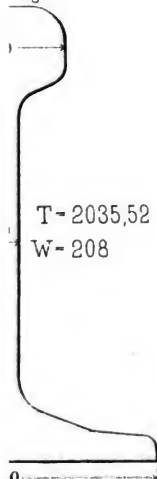


Altona Kaldenkirchen.

23,56 kg.

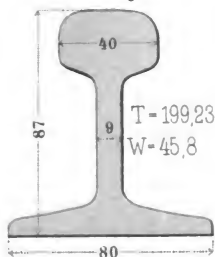


isenbahn.
kg.



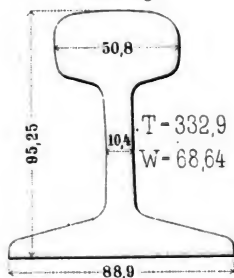
Bayern.

16,0 kg



Dänemark.

22,46 kg.



stehen sich nur annähernd in kg. pro lfd. Meter.

Staatsbahn.

12,25 kg.



Württemberg.

11,4 kg.



Rechtsrhe

10



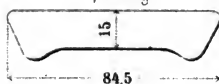
Hannover.

10,53 kg.



Badische Bahn.

9,75 kg.



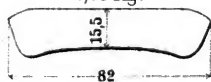
Thür

8



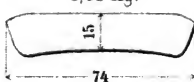
Krupp.

9,98 kg.



München.

8,58 kg.



Frank

8,



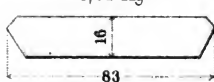
Main-Neckar-Bahn.

11,62 kg.



Westfalen.

9,52 kg.



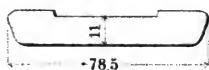
Old

9



Altona Kaldenkirchen.

7,1 kg.



Magdeburg.

9,36 kg.



Hol

6,



inische Bahn.

9 kg.



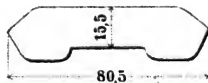
Westfalen.

10,1 kg.



Schweizer Westbahn.

10,53 kg.



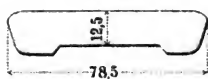
ingen.

5 kg.



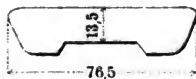
Secundärbahn.

8,27 kg.



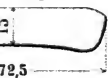
Altona.

8,7 kg.



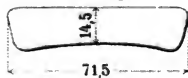
furt a/M.

6 kg.



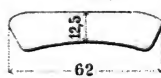
Württemberg.

8,2 kg.



Baden.

6,2 kg.



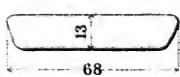
enburg.

2 kg.



Viege-Zermatt.

6,63 kg.



Dänemark.

5,7 kg.



stein.

7 kg.



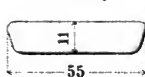
Schweizer Nord-Ostbahn.

8,66 kg.

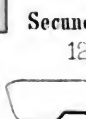
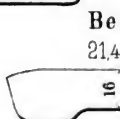
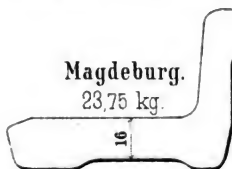
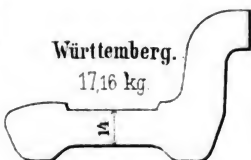


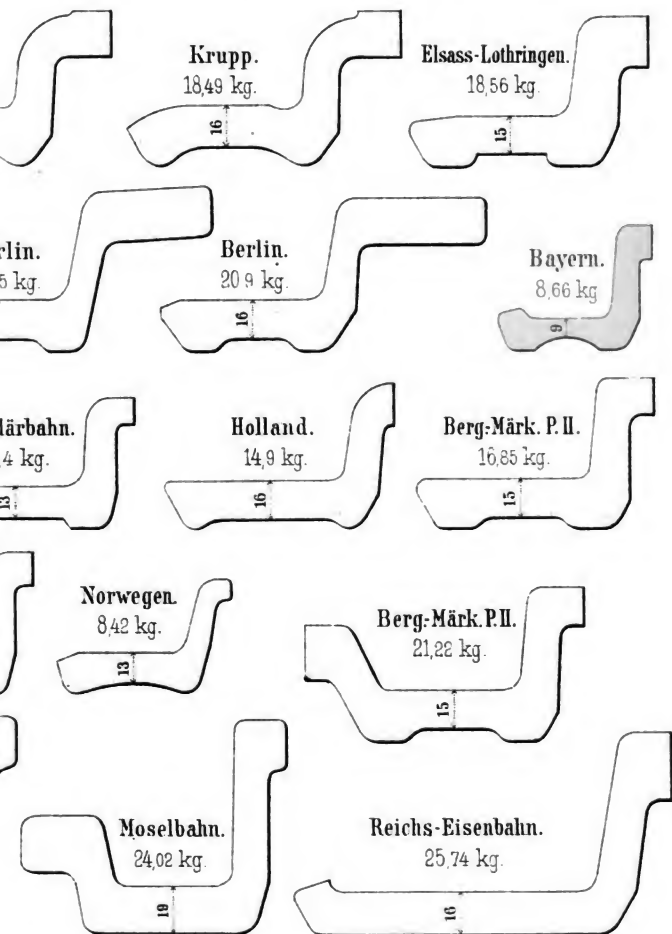
Rigibahn.

4,68 kg.



ehen sich nur annähernd in kg. pro lfd. Meter.





stehen sich nur annähernd in kg. pro lfd. Meter.

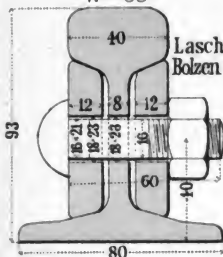
Blatt 25.

Laschenlänge = 314 mm.

Nº 44 16,22 kg

Trf = 5720

W = 55

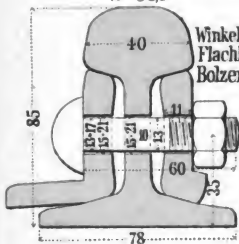


Lasche 1,86 kg.
Bolzen 0,17 kg.

Nº 34 17,47 kg

Trf = 5210

W = 50,1

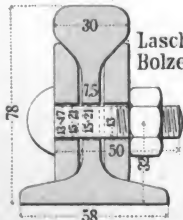


Winkellasche 1,98 kg.
Flachlasche 1,52 kg.
Bolzen 0,13 kg.

Nº 6 10,7 kg

Trf = 3080

W = 29,6



Lasche 1,3 kg.
Bolzen 0,12 kg.

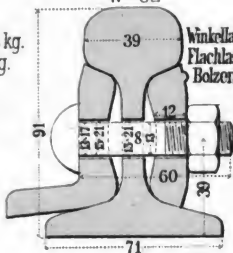
HOERDER BERGWERK

Gruben und Pferdebahnschi

Nº 4 17,2 kg

Trf = 5400

W = 52

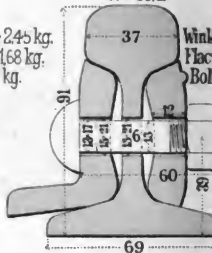


Winkellasche 2,45 kg.
Flachlasche 1,68 kg.
Bolzen 0,13 kg.

Nº 16 15,75 kg

Trf = 5120

W = 49,2

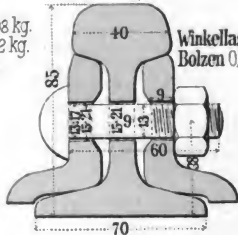


Winkellasche 2,45 kg.
Flachlasche 1,68 kg.
Bolzen 0,13 kg.

Nº 39 15,8 kg

Trf = 4920

W = 47,3



Winkellasche 1,9 kg.
Bolzen 0,13 kg.

Nº 13 15,8 kg

Trf = 3800

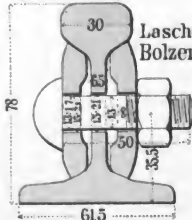
W = 30,1



Nº 37 10,0 kg

Trf = 3110

W = 29,9

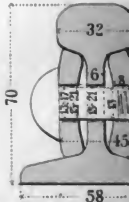


Lasche 1,05 kg.
Bolzen 0,12 kg.

Nº 33 10,0 kg

Trf = 2620

W = 25,16



Die Tragfähigkeit der Schienengeleise ist annähernd in kg. pro Wagenachse für 1 Meternahme des Materials von 13 kg. pro Quadratmillimeter Querschnittsfläche der Schienen. Bei einer größeren oder kleineren Entfernung der Querschnittswellen als 100 Centimeter, also bei anderen Abständen der Querschnittswellen, sind die Gewichte zu vermindern oder zu erhöhen.

Die Maße sind in Millimeter. Die Gewichte verstehen sich nur annähernd.

S- & HÜTTEN-VEREIN.

1892.

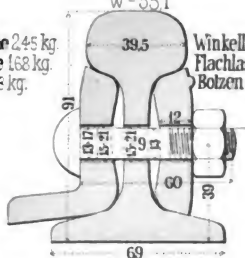
nen mit Laschenverbindung. Die Widerstandsmomente sind annähernd auf Centimeter bezogen.

N^o 16 a 17,3 kg

Trf = 5730
W = 55,1

Lasche 2,45 kg.
Flasche 1,68 kg.
Bolzen 0,13 kg.

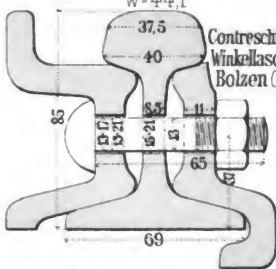
Winkellasche 2,45 kg.
Flachlasche 1,68 kg.
Bolzen 0,13 kg.



N^o 19 15,2 kg

Trf = 4590
W = 44,1

Contreschiene 4,16 kg.
Winkellasche 2,82 kg.
Bolzen 0,14 kg.



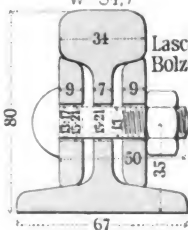
4 kg

N^o 41 12,8 kg

Trf = 3600
W = 34,7

Lasche 1,52 kg.
Bolzen 0,13 kg.

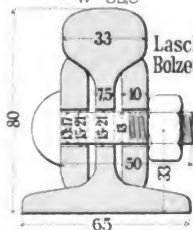
Lasche 1,1 kg.
Bolzen 0,12 kg.



N^o 35 12,64 kg

Trf = 3380
W = 32,5

Lasche 1,20 kg.
Bolzen 0,12 kg.



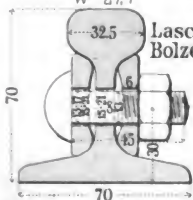
kg

N^o 30 11,7 kg

Trf = 2880
W = 27,7

Lasche 0,8 kg.
Bolzen 0,12 kg.

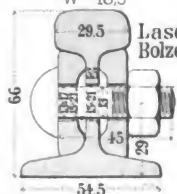
Lasche 0,63 kg.
Bolzen 0,12 kg.



N^o 31 8,2 kg

Trf = 1925
W = 18,5

Lasche 0,92 kg.
Bolzen 0,12 kg.

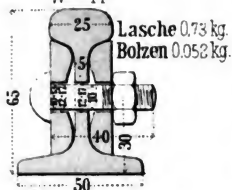


Abstand der Querschwellen bei den Schienen vermerkt und zwar bei einer Inanspruchnahme, also für eine ungefähr 4fache Sicherheit, welche für die Praxis hinänglich genügt. Centimeter, ist die angeführte Tragfähigkeit der Schienen mit $\frac{100}{11}$ zu multiplicieren.
und in kg. pro lfd. Meter; resp. pro Stück bei Laschen und Bolzen.

Nº 10 6,94 kg.

Trf. - 1460

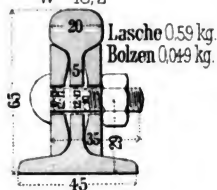
W = 14



Nº 40 6,24 kg.

Trf. - 1370

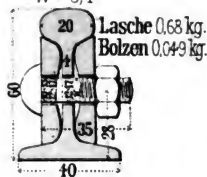
W = 13,2



Nº 15 5,0 kg.

Trf. - 980

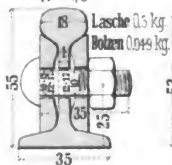
W = 9,4



Nº 24 4,52 kg

Trf. - 820

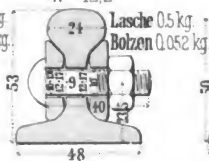
W = 7,9



Nº 2 7,8 kg

Trf. - 1270

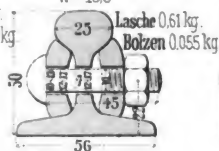
W = 12,2



Nº 29 6,9 kg

Trf. - 1070

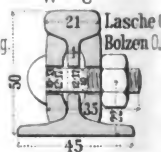
W = 10,3



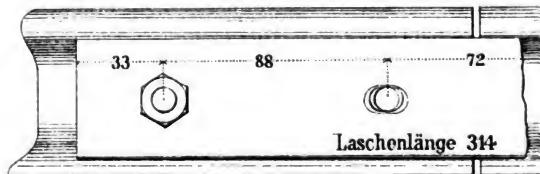
Nº 42 4,68 kg

Trf. - 830

W = 8



Längenansicht der Schienen

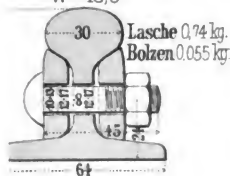


Die Maasse sind Millimeter. Die Gewichte in Kilogramm.

Nº 28 9,98 kg.

Trf. = 1935

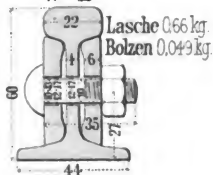
W = 18,6



Nº 43 5,46 kg.

Trf. = 1140

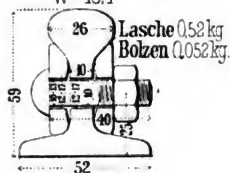
W = 11



Nº 3 9,3 kg.

Trf. = 1635

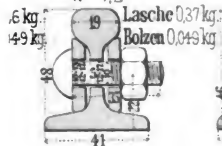
W = 15,7



Nº 11 5,1 kg

Trf. = 750

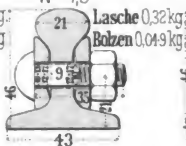
W = 7,2



Nº 1 6,2 kg

Trf. = 780

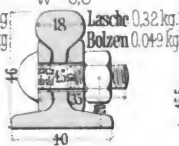
W = 7,5



Nº 17 4,84 kg

Trf. = 680

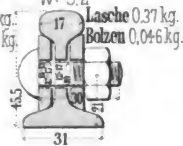
W = 6,5



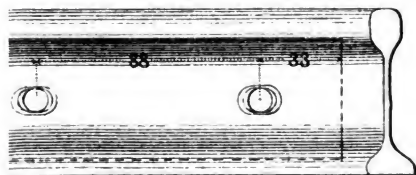
Nº 25 3,90 kg

Trf. = 640

W = 5,2



enverlaschung.



Nº 32 2,1 kg

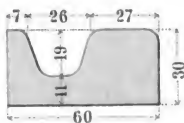
Trf. = 200

W = 1,9

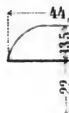
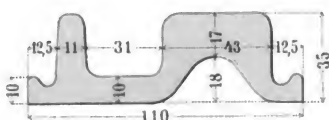


stehen sich nur annähernd in kg. pro lfd. Meter.

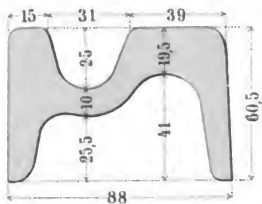
N^o38 10,9 kg.



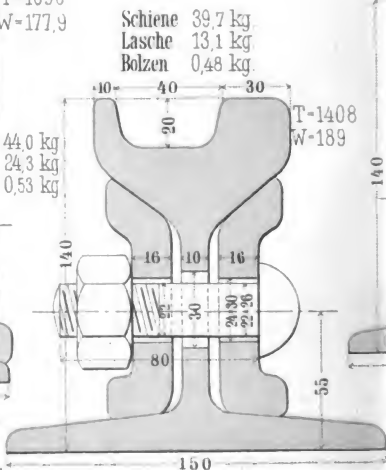
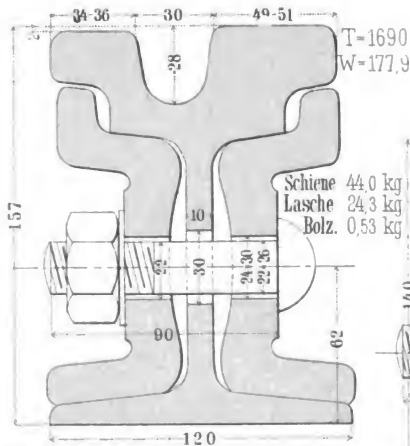
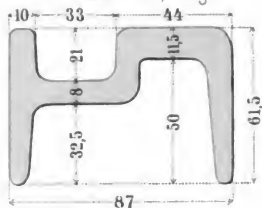
N^o12 15,5 kg.



N^o26 19,9 kg.



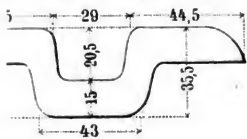
N^o21 14,4 kg.



W. Ueber Rillenschienen, welche noch in grösserer Anzahl hergestellt werden, ist ein besonderes Profilheft vorhanden.

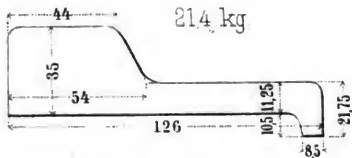
Die Maasse sind Millimeter. Die Gewichte per

N^o 14 14,9 kg.

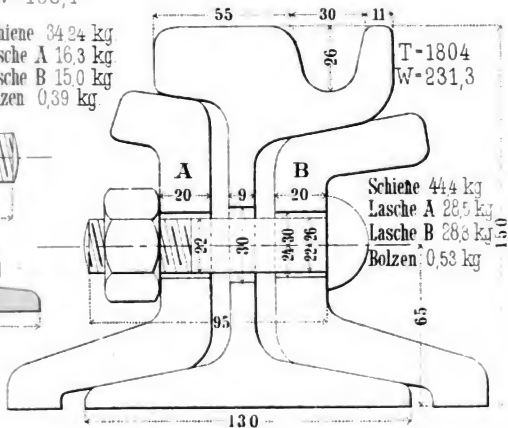
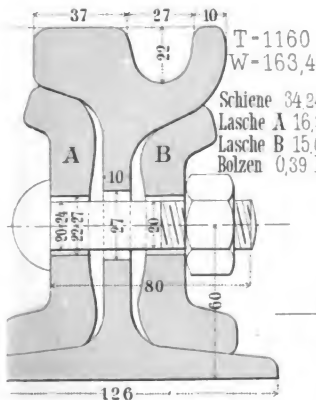
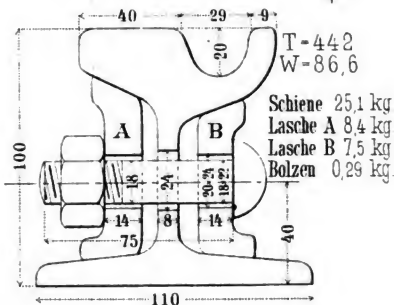
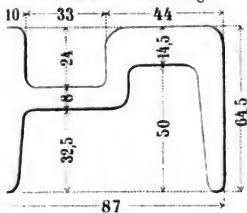


N^o 27

214 kg



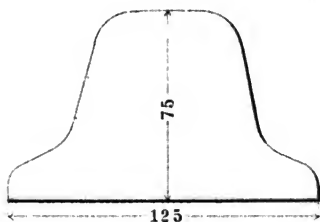
N^o 22 16,1 kg.



stehen sich nur annähernd in kg. pro lfd. Meter:

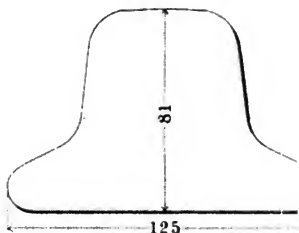
Holz & C^o

46,64 kg



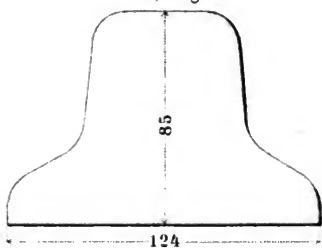
Bayerische Ostbahn.

49,76 kg



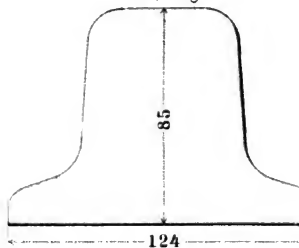
Oderbahn.

52,0 kg



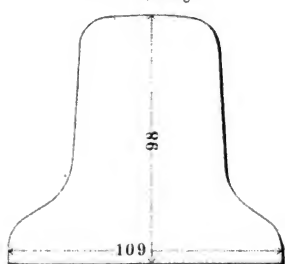
Frankfurt-Bebra.

49,4 kg



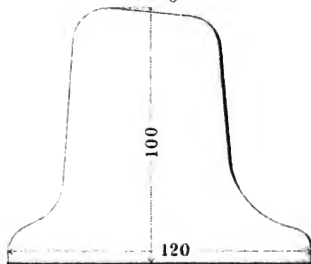
Berlin-Hamburg.

52,4 kg



Erfurt.

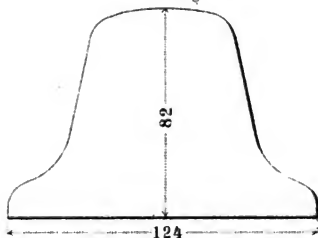
55,7 kg



Die Maasse sind Millimeter. Die Gewichte in Kilogramm.

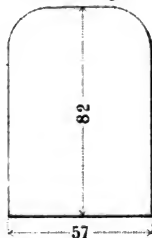
Frankfurt.

49,5 kg.



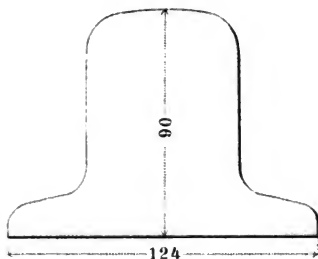
Vögele, Mannheim.

36,2 kg.



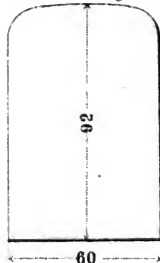
Erfurt.

49,0 kg.



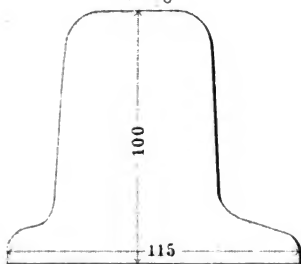
Hannover.

42,6 kg.



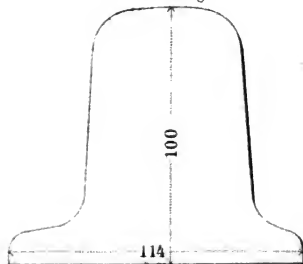
Württemberg.

53,2 kg.



Hannover.

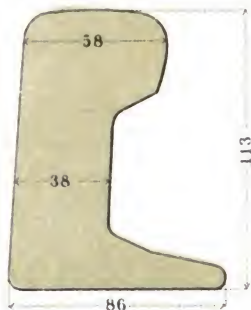
53,8 kg.



stehen sich nur annähernd in kg. pro lfd. Meter.

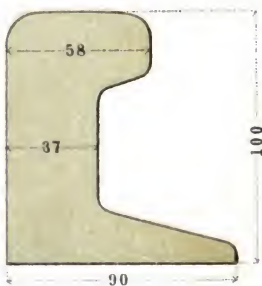
Main-Neckar-Bahn.

44,0 kg

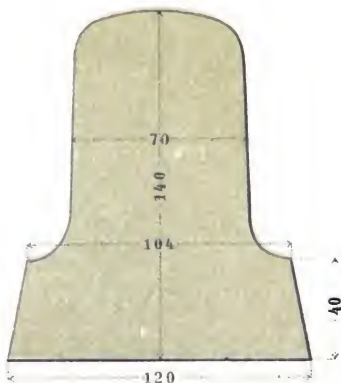


Elsass - Lothringen.

38,2 kg

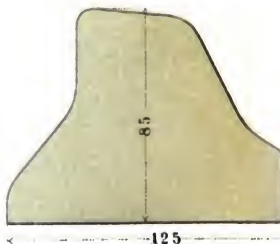


88,3 kg.



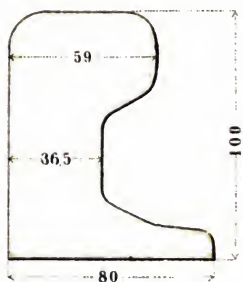
Altona u. Köln-Minden.

52,5 kg



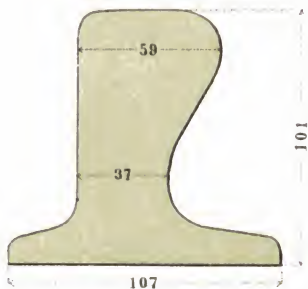
Elsass-Lothringen.

39,6 kg



Hannover.

43,1 kg

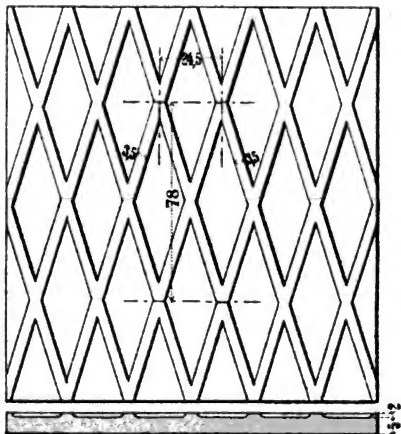


Rippen-oder

Die geringste Stärke beträgt 5 mm.

Nº 1

Gew pro qm. 44,2 kg.



Die Maasse sind Millimeter-Die Gewichte

Riffel-Blech.

exd. Rippen. Maximum der Breite 1100 mm.

stehen sich nur annähernd in kg. pro lfd. Meter.

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Hoerder Bergwerks- und Hüttenvereins

Rillenscheide

